

1 UNITED STATES DISTRICT COURT  
2 DISTRICT OF OREGON  
3 THE HON. ANN AIKEN, JUDGE PRESIDING  
4

5  
6 UNITED STATES OF AMERICA, )  
7 Government, )  
8 v. ) No. 6:11-cr-60097-AA-1  
9 CODY SETH CRAWFORD, )  
10 Government. )  
11 \_\_\_\_\_ )  
12

13 REPORTER'S TRANSCRIPT OF PROCEEDINGS

14 EUGENE, OREGON

15 TUESDAY, JANUARY 6, 2015

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PROCEEDINGS

TUESDAY, JANUARY 6th, 2015

THE COURT: Please be seated.

THE CLERK: This is the time set for oral argument in the United States of America v. Cody Crawford, Case No. 11-60097.

THE COURT: Good morning.

MR. FITZGERALD: Good morning, Your Honor. I believe the parties have a good understanding of what witnesses are going to be called; have provided each other with notice of exhibits. And I think we have mostly an agreement as to those exhibits. I think there will be a need to lay a foundation on some of these exhibits. But I think that the exhibits that the court has before it are those, in large part, that the parties would agree the court should consider, along with the testimony of the witnesses.

The government has three witnesses that it intends to call on the motion. The first witness will be Bill Soule from the FBI. The second witness will be Amber Carr, who is a biologist at the FBI Lab in Quantico. And then a third witness, Craig Mueller, is not available today, but he is available to testify at the court's convenience, and Mr. Lessley and I are hoping that the court would have time tomorrow to hear his testimony.

THE COURT: I scheduled two and a half days, so I

1 am hopeful that we can find an appropriate time.

2 MR. FITZGERALD: Your Honor, you have undoubtedly  
3 read through the papers, so you are aware that we have a  
4 controversy about, really, two items of evidence:

5 A bottle cap that the government is going to offer  
6 as evidence at the trial of this matter, which was swabbed  
7 for DNA at the FBI Lab and compared to a known sample of the  
8 defendant's DNA and determined to be a match.

9 The second item is a flashlight that was taken  
10 from the scene, the crime scene; was swabbed at the FBI Lab;  
11 again, compared to a known sample of the defendant's DNA;  
12 and, again, a match.

13 The defense contends that there are errors in the  
14 collection and handling of those items of evidence and in  
15 the documentation regarding the handling of those items of  
16 evidence that make the tests unreliable in the sense that  
17 there is not certainty that the items that were actually  
18 tested came from the crime scene.

19 So that is, in a nutshell, what the controversy is  
20 about.

21 There is a case that has been decided since the  
22 government filed its response to the motion, which is an  
23 important case that I feel the court needs to be aware of.  
24 I have made copies of the decision; provided the defense  
25 with notice of the decision. But it's the case of *City of*

1 *Pomona v. SQM North America Corporation*. Again, I have a  
2 copy of the case here. The cite is 750 F.3d 1036. It's a  
3 2014 case. And *certiorari* has been denied. It was denied  
4 on the 5th of December -- denied December 15th, 2014.

5 The case involved the City of Pomona, a  
6 contaminated water system, which was found to contain a  
7 chemical perchlorate. It was determined that that chemical  
8 was sodium nitrate, which was used as a fertilizer, and the  
9 city brought action against the company that actually  
10 imported the fertilizer for use in the surrounding land.

11 And that case was brought in federal court in the  
12 Central District of California. Judge Klausner held an  
13 evidentiary hearing under *Daubert* and excluded the city's  
14 expert witness. The city appealed, and the Ninth Circuit  
15 held that the exclusion was an abuse of discretion.

16 Again, that opinion is the most recent case law,  
17 pertinent case law on the issue before the court, and that  
18 is what is the standard to be applied in situations like  
19 this where we have alleged errors in the methodology and the  
20 application of the methodology as opposed to unreliable  
21 methodology.

22 And the case is also important because it  
23 specifically references authorities cited in the  
24 defense motion, namely, the *Paoli* case out of the  
25 Third Circuit and explicitly rejects that

1       rationale and says that the "SQMNA," which is the  
2       fertilizer importer, "urges the court to take a  
3       guarded approach to the issue of an expert's  
4       adherence to protocol. See *In re Paoli*, Third  
5       Circuit 1994, holding that any step that renders  
6       the expert's analysis unreliable renders the  
7       expert testimony inadmissible.

8                "In the Ninth Circuit, however, expert  
9       evidence is inadmissible where the analysis is the  
10      result of a faulty methodology or theory as  
11      opposed to imperfect execution of laboratory  
12      techniques whose theoretical foundation is  
13      sufficiently established" -- I am sorry --  
14      "sufficiently accepted in the scientific community  
15      to pass muster under *Daubert*.

16              "The rationale of this approach is that a  
17      minor flaw in an expert's reasoning or a slight  
18      modification of an otherwise reliable method does  
19      not render expert testimony inadmissible."

20              So the government would ask that the court  
21      consider the *City of Pomona* case.

22              One other matter, Your Honor. As the court is  
23      aware, we have got one of our witnesses appearing by VTC  
24      this morning. That is Amber Carr in Quantico, Virginia, and  
25      I am advised that she should be prepared to testify around

1 ten o'clock our time. So I am hopeful that we can put  
2 Mr. Soule on the stand, get his testimony, and get Ms. Carr  
3 on VTC at ten o'clock.

4 That's all I have.

5 THE COURT: Mr. Lessley.

6 MR. LESSLEY: Your Honor, to be specific about a  
7 couple of things, the government has provided to us and I  
8 think to the court 13 exhibits. Mr. Fitzgerald is correct.  
9 We have largely stipulated to those. The only two about  
10 which I said I wanted there to be some foundation are  
11 Exhibits 5 and 7, which are both chronologies, and I expect  
12 Agent Soule will testify to those. I don't honestly expect  
13 there to be a dispute about the admissibility of the  
14 exhibits. I just wanted that foundation in.

15 We also have exhibits numbered A through X. I can  
16 tender those to the court now. I believe the government is  
17 stipulating to the admissibility of all of them.  
18 Mr. Fitzgerald can tell me if I am wrong about that.

19 MR. FITZGERALD: No objection.

20 THE COURT: They will be received. Thank you.

21 MR. LESSLEY: Then I am right.

22 And so it was our intention, I think, to preadmit  
23 all the exhibits except for the two that Agent Soule is  
24 going to testify about the foundation of.

25 Mr. Fitzgerald did me the courtesy of making me



1 aware of the *City of Pomona* case. It was decided after the  
2 briefing was done in this matter.

3 I am prepared to address it at greater length  
4 after the evidence is in. Essentially our claim is that  
5 this isn't a minor flaw and it isn't a minor technical  
6 problem with the custody of the items.

7 Let me give my little background about what I  
8 think the issues are because the issues are slightly  
9 different as to the flashlight and the bottle cap.

10 As to both items, we claim that the handling of  
11 the items in the FBI Lab and the documentation of the  
12 handling is inadequate to meet *Daubert* standards for how  
13 methodology should be applied.

14 And that's the *City of Pomona* issue. Before then  
15 it was *Paoli* and *Chischilly*, but *City of Pomona* is now the  
16 current authority on that.

17 As to the bottle cap, there's an additional issue,  
18 and that is as to its collection and handling in Oregon, and  
19 that is we dispute that the bottle cap that was tested in  
20 the FBI Lab was the bottle cap that was seen at the premises  
21 of the mosque, or at least we dispute that the government  
22 can satisfy any burden of proof that that's true. And  
23 that's independent of the *Daubert* standard, and it's an  
24 independent ground that we have raised in our motion.

25 Simply, it's more what we would refer to as a

1 chain-of-custody or an identification issue.

2 And so that also is an issue here independent of  
3 *City of Pomona* or independent of the *Daubert* issues.

4 With that background, I think we should proceed  
5 with the evidence.

6 MR. FITZGERALD: Your Honor, the government calls  
7 William Soule.

8 THE COURT: Come forward and be sworn.

9 THE CLERK: Please step forward. Watch your step  
10 entering the witness stand. And once up there, please raise  
11 your right hand.

12 (The witness was sworn.)

13 THE CLERK: Please state your full name and spell  
14 your last name for the record.

15 THE WITNESS: William M. Soule, S-O-U-L-E.

16 THE CLERK: Thank you.

17 **DIRECT EXAMINATION**

18 BY MR. FITZGERALD:

19 Q. Good morning. You are a special agent with the FBI  
20 here in Eugene; is that correct?

21 A. Yes.

22 Q. And you have been a special agent for nearly 24 years?

23 A. Correct.

24 Q. Have you received any training in evidence handling?

25 A. Yes, I have.

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1 Q. Could you talk about that.

2 A. I received training at our FBI Academy. I have also  
3 been a member of the Portland Division's Evidence Response  
4 Team for a number of years.

5 THE COURT: Can you fix -- I am sorry. Can you  
6 fix the sound? It's just going to drive me crazy. It's too  
7 tinny.

8 THE CLERK: I am sorry. I am trying.

9 MR. LESSLEY: I heard it when I was speaking.

10 THE COURT: I know. It's echoing. Mine is  
11 echoing. It just needs more bass. Always it needs more  
12 bass.

13 MR. LESSLEY: And nobody make any jokes.

14 THE COURT: The marshal's service will break out  
15 in dance.

16 MR. FITZGERALD: It might help if I move the  
17 microphone away from myself a bit. I will try modulating my  
18 voice.

19 BY MR. FITZGERALD:

20 Q. Are you the lead agent in *United States versus Cody*  
21 *Crawford*?

22 A. I am.

23 Q. As the lead agent, are you familiar with the records  
24 and reports that have been turned over to the defense in  
25 discovery in this case?

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1 A. Yes, I am.

2 Q. Do those records and reports include the following:  
3 Corvallis Police reports of investigation, otherwise known  
4 as incident reports?

5 A. Yes.

6 Q. Photographs?

7 A. Yes.

8 Q. Including photographs of a bottle cap at the crime  
9 scene?

10 A. Yes.

11 Q. Photographs of evidence?

12 A. Yes.

13 Q. Chain-of-custody documents?

14 A. Yes.

15 Q. Lab notes?

16 A. Yes.

17 Q. Declarations of FBI Lab personnel?

18 A. Yes.

19 Q. Do you have the government exhibits in front of you?

20 A. I do.

21 Q. Please turn to Government Exhibit 1.

22 What is government Exhibit 1?

23 A. It contains excerpts from the Corvallis Police  
24 Department incident report related to this case.

25 Q. So that's not the entire Corvallis Police report

1 regarding this case?

2 A. Correct.

3 Q. Can you tell the court about why those excerpts were  
4 selected?

5 A. These contain the crime scene -- the reports from the  
6 officers that were the initial responders to the crime scene  
7 and some others.

8 Q. Can you name some of the officers?

9 A. Officer Greg Blount, Officer Jef Van Arsdall, Officer  
10 Jeremy Parrish. I believe Page 7 of 12 is an expert -- an  
11 excerpt of the report of Officer Brett Roach. We have pages  
12 from the report of Officer Bryan Rehnberg and pages from the  
13 report of Detective Tyson Poole.

14 Q. A total of 12 pages in Government Exhibit 1?

15 A. Correct.

16 Q. What about Government Exhibit 2? What's Government  
17 Exhibit 2?

18 A. Government Exhibit 2 is a crime scene photograph in  
19 which can be seen a brick and a bottle cap that were  
20 collected as evidence.

21 Q. Where is the bottle cap located in Government Exhibit  
22 2?

23 A. It is located at the top of the photograph beneath the  
24 gas barbecue.

25 Q. What is Government Exhibit 3?

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1 A. It is a photograph of FBI Evidence Item 1B3, Corvallis  
2 Evidence Item JTP2.

3 Q. And how are you familiar with that item of evidence?

4 A. That is one of the items of evidence that is a point of  
5 contention in this hearing. It's an item of evidence that  
6 we collected in the case.

7 Q. What is Government Exhibit 4?

8 A. It is a photograph of the back of the evidence envelope  
9 for JTP2 and its contents.

10 Q. Again, how are you familiar with that?

11 A. It's an item of evidence in our possession.

12 Q. What is Government Exhibit 5?

13 A. This is a chronology that I prepared related to the  
14 collection and movement of some of the evidence in this  
15 case.

16 Q. Why did you prepare Government Exhibit 5?

17 A. I prepared it to be an aid to the court.

18 Q. What documents did you get your information from for  
19 Government Exhibit 5?

20 A. Corvallis Police Department reports, FBI evidence  
21 records, and FBI 302s.

22 Q. What is Government Exhibit 6?

23 A. It is an FBI evidence record related to FBI Evidence  
24 Item 1B3.

25 Q. What is Government Exhibit 7?

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1 A. It is a diagram that I prepared that shows the movement  
2 of Evidence Item -- FBI Evidence Item 1B3.

3 Q. And 1B3 is the evidence item containing the bottle cap;  
4 is that correct?

5 A. Correct.

6 Q. Why did you prepare Government Exhibit 7?

7 A. Again, as an aid to the court.

8 Q. And what documents did you use to prepare Exhibit 7?

9 A. The same documents that I used to prepare Government  
10 Exhibit 5.

11 Q. What is Government Exhibit 8?

12 A. This is an FBI Laboratory report dated April 2nd, 2012.

13 Q. Is that the report regarding the DNA analysis of the  
14 bottle cap?

15 A. Yes.

16 Q. What is Government Exhibit 9?

17 A. This is another FBI Laboratory report. This is dated  
18 January 26th, 2011.

19 Q. And to what does that report refer?

20 A. DNA analysis related to the flashlight that was  
21 collected at the crime scene.

22 Q. What is Government Exhibit 10?

23 A. This is a declaration of Mark Whitworth, who is a  
24 supervisory special agent in the Explosives Unit at the FBI  
25 Laboratory.

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1 Q. Why was this declaration made?

2 A. It was made to address some of the issues that were  
3 raised by the defense regarding the handling of evidence at  
4 the FBI Laboratory.

5 Q. I see that there are other documents in Government  
6 Exhibit 10 besides the declaration. Generally speaking,  
7 what are those documents?

8 A. These are all FBI Laboratory documents. They include  
9 chains of custody, laboratory notes, laboratory worksheets.

10 Q. Source documents for Mr. Whitworth's conclusions?

11 A. Yes.

12 Q. Government Exhibit 11.

13 A. This is a declaration of Jade Gray. She is a forensic  
14 examiner in the Nuclear DNA Unit at the FBI Laboratory.

15 Q. Why was this declaration made?

16 A. Again, to address issues that were raised by the  
17 defense related to the handling of evidence at the  
18 laboratory.

19 Q. Again, I see documents other than the declaration that  
20 are included in Government Exhibit 11.

21 What are they?

22 A. They include Chain-of-Custody Logs, a Laboratory  
23 Worksheet, DNA Sample Processing Record, and I believe  
24 that's it.

25 Q. Source documents for Ms. Gray's conclusions?



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1 A. Yes.

2 Q. What is Government Exhibit 12?

3 A. It is the curriculum vitae for Jade Gray.

4 Q. And I see that she goes by Jade Eberts. Is that her --

5 A. Married name.

6 Q. Government Exhibit 13.

7 A. This is an FBI Laboratory report titled Dilution and  
8 Merge Notes.

9 Q. Does that refer to a particular item of evidence?

10 A. I believe it refers to evidence -- the DNA evidence  
11 related to the flashlight in this case.

12 MR. FITZGERALD: Your Honor, I'd move for the  
13 admission of Government's Exhibits 1 through 13.

14 THE COURT: Mr. Lessley.

15 MR. LESSLEY: No objection, Your Honor.

16 THE COURT: They will be received.

17 BY MR. FITZGERALD:

18 Q. Special Agent Soule, referring to Government Exhibit 5,  
19 can you tell the court, when were the photographs of the  
20 bottle cap and crime scene taken?

21 A. Well, the responding officer, Sergeant Jef Van Arsdall,  
22 discovered the fire and responded about 2:16 a.m. on the  
23 morning of November 28th, 2010. So the photographs and  
24 evidence collection occurred shortly thereafter.

25 Q. So the photographs were taken at approximately the same

1 time the evidence was collected?

2 A. Correct.

3 Q. Where was the bottle cap?

4 A. The bottle cap was located at the scene close to the  
5 window of the mosque wherein the fire occurred, and it was  
6 located beneath a barbecue near that window.

7 Q. What happened to it?

8 A. It was collected based on --

9 MR. LESSLEY: Objection; calls for speculation.

10 MR. FITZGERALD: Well, Your Honor, again, he has  
11 testified that he's familiar with the reports.

12 THE COURT: Sustained, but rephrase your question.

13 BY MR. FITZGERALD:

14 Q. In referring to the reports, again, the reports that  
15 you have reviewed and that you have testified you are  
16 familiar with, do you know where the bottle cap was?

17 MR. LESSLEY: Well, objection. This calls for a  
18 hearsay answer. I don't mind if he's asked if he can  
19 summarize what the reports say, but I don't want it to come  
20 across as his having personal knowledge of any of this  
21 information.

22 MR. FITZGERALD: Judge, this is a motion hearing.  
23 The rules of evidence don't strictly apply. Reliable  
24 hearsay is admissible.

25 THE COURT: I understand that, but there's an

1 issue in this case, so the more specificity the better. So  
2 let's rephrase the question.

3 BY MR. FITZGERALD:

4 Q. When was -- are you familiar with JTP2?

5 A. I am.

6 Q. What is JTP2?

7 A. It is a Corvallis Police Department evidence item. It  
8 was described as a bag that originally contained the Fanta  
9 bottle that was found at the crime scene along with burned  
10 residue.

11 Q. Who assigned that particular item of evidence the JTP2  
12 number?

13 A. It was packaged, and the evidence number was assigned  
14 by Detective James Poole, Tyson Poole.

15 Q. Was JTP2 sealed?

16 A. Yes, it was.

17 Q. By whom?

18 A. By Tyson Poole.

19 Q. And is there a document -- is there a government  
20 exhibit that shows the fact of sealing? The point it was  
21 sealed?

22 A. There is a photograph of that item, which is sealed  
23 with evidence tape. That would be Government Exhibit 3.  
24 And there is a labeling on the outside of that evidence item  
25 that indicates the date and time.

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1 Q. What does that evidence tag indicate?

2 A. That it was sealed at -- on November 28th, 2010, at  
3 6:30 a.m.

4 Q. Have you reviewed documents that indicate to you when  
5 that seal was broken?

6 A. Yes, I have.

7 Q. Could you tell the court when the seal was broken?

8 A. It was broken sometime later by FBI Laboratory  
9 personnel. Without reviewing the reports, I couldn't give  
10 you a time or date on that.

11 Q. When was JTP2 sent to -- or what happened to JTP2? Did  
12 it get transferred from the Corvallis Police Department to  
13 some other entity?

14 A. Yes. That item of evidence, along with the other crime  
15 scene evidence, was turned over to Special Agent Craig  
16 Mueller with the FBI on the afternoon of November 28th,  
17 2010, and he transported that evidence to the Portland FBI  
18 office and secured it in the office until the following day.

19 Q. So the following day would have been November 29th?

20 A. Correct.

21 Q. Do you know -- from looking at documents in evidence,  
22 do you know when that -- do you know when that item, JTP2,  
23 left the custody of the FBI in Portland?

24 A. Yes. The chain-of-custody records reflect that FBI  
25 evidence technician Lori Smith shipped that evidence to the

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1 crime lab at approximately 1:55 p.m. on November 29th, 2010.

2 Q. And at the time that item was shipped, at that time was  
3 it assigned a new evidence number?

4 A. Yes. When the FBI entered the evidence that it  
5 obtained from the Corvallis Police Department into the FBI's  
6 evidence system, each item of evidence received a new FBI  
7 evidence number.

8 Q. So who assigned the new -- who assigned the new number?

9 A. The numbers are assigned sequentially by the evidence  
10 system, our computer system. The first item of evidence  
11 would be 1B1, the second would be 1B2, and so on.

12 Q. Who was it that input that information into the  
13 computer?

14 A. I don't know based on the records that I have whether  
15 it was Craig Mueller or whether it was our evidence tech,  
16 Lori Smith.

17 Q. When that information was input into the computer, did  
18 the evidence number change?

19 A. Yes. Like I said, our computer system will assign it  
20 an evidence number, and that will be sequentially assigned,  
21 starting with Item 1B1.

22 Q. What did JTP2 become?

23 A. It became FBI Evidence Item No. 1B3.

24 Q. So when it -- when it was shipped from the FBI in  
25 Portland to the FBI Lab, did it remain Exhibit 1B3?

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1 A. Yes.

2 Q. For how long?

3 A. Well, the FBI Laboratory has its own evidence numbering  
4 system. But there's a correlation between all of the items  
5 of evidence in the FBI's evidence records and also in the  
6 FBI Laboratory's records.

7 Q. Did 1B3 change numbers when it arrived at the FBI Lab?

8 A. Yes. The FBI Lab assigned it Q3, Item No. Q3.

9 Q. And what documents are you referring to? Are you  
10 referring to Government Exhibit 6?

11 A. Well, Government Exhibit 6 is FBI Portland's evidence  
12 record, and then the description can be seen, our evidence  
13 item number, and a reference to Corvallis Police  
14 Department's evidence item number that corresponded, and  
15 then after the evidence was received back from the lab, a  
16 note was made in the description to correlate it to the FBI  
17 Laboratory evidence Item No. Q3.

18 Q. Again, looking at Government Exhibit 6, does Government  
19 Exhibit 6 describe the exhibit?

20 A. Yes.

21 Q. And does it describe it by several different numbers?

22 A. Yes.

23 Q. And what are those numbers?

24 A. Again, it has the FBI Portland's evidence item number  
25 on there, which is 1B3. It references the Corvallis Police

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1 Department evidence Item No. JTP2, and also the evidence  
2 item number that the FBI Laboratory assigned to it, Q3.

3 Q. It's all the same evidence; is that right?

4 A. Correct. It's one item of evidence.

5 Q. What is the description of the evidence?

6 A. The description is "Bag with burned residue that held  
7 two-liter Fanta bottle." And then it goes on to say,  
8 "Corvallis Police Department No. JTP2."

9 Q. And it doesn't say anything about a bottle cap?

10 A. No, it doesn't.

11 Q. Do you know why?

12 A. The evidence descriptions were taken primarily from the  
13 descriptions that Corvallis Police Department listed on  
14 their evidence records. Unless an item of evidence required  
15 further processing in the field by the FBI, it would not  
16 have been opened.

17 So the description that the FBI would have would  
18 be that assigned to it by the Corvallis Police Department at  
19 that point.

20 Q. So this description on Government Exhibit 6 is the same  
21 description of the evidence that Corvallis Police had for  
22 that exhibit?

23 A. It would be close. I haven't compared the two exactly,  
24 but yes, it should be the same.

25 Q. When was the evidence seized from the defendant's home,

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1 again referring back to Government Exhibit 5?

2 A. A search warrant was initiated at the Crawford  
3 residence at 1:40 a.m. on November 29th, 2010.

4 Q. Where was JTP2/1B3 at that point?

5 A. It was secured at the FBI office in Portland, Oregon.

6 Q. When was the evidence seized from the defendant's  
7 garage?

8 A. The search warrant of the defendant's garage was  
9 executed at 6:35 p.m. on the evening of November 29th, 2010.

10 Q. Where was JTP2/1B3 at that time?

11 A. It would have been en route to the FBI Laboratory in  
12 Quantico, Virginia. It was shipped at -- earlier that day  
13 at 1:55 p.m.

14 Q. Did you participate in the search warrant at the  
15 defendant's home?

16 A. Yes, I did.

17 Q. Did you also participate in the search warrant at the  
18 defendant's garage?

19 A. I did.

20 Q. Do you know whether any bottle caps were seized?

21 A. To the best of my knowledge, no bottle caps or soda  
22 bottles were seized.

23 Q. Again, referring to Exhibit 5, I am going to direct  
24 your attention to January 20th of 2012.

25 Do you see an entry referring to yourself?



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1 A. Yes.

2 Q. What does it say?

3 A. It says, "After having read an FBI Lab report  
4 referencing the bottle cap, SA Soule briefly  
5 accepted custody of 1B3 from evidence storage in  
6 order to visually examine the bottle cap."

7 Q. What else did you do to the bottle cap?

8 A. Nothing. I opened the evidence item in order to  
9 visually inspect the bottle cap.

10 Q. Did you perform any tests on it?

11 A. No.

12 Q. How long did you have it in your possession?

13 A. I believe the evidence chain of custody reflects that I  
14 had custody of that evidence item for 22 minutes.

15 Q. There's been a suggestion that the chain-of-custody  
16 documents in this case that the FBI had do not describe the  
17 evidence.

18 Is that true?

19 A. That the chain-of-custody documents do not describe the  
20 evidence? Yes, that is true.

21 Q. Is there any document associated with those  
22 chain-of-custody documents that does describe the evidence?

23 A. Yes. Item -- I mean Government Exhibit No. 6 is an  
24 example of an FBI evidence record. They were formerly known  
25 as FD-192s. Our system changed since the initiation of this

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1 case. We have a new system. The forms are now called  
2 FD-1087. And that would be -- that would serve as a cover  
3 sheet for the chain of custody for that item of evidence.

4 Q. Again referring to Government Exhibit 5, why was 1B3  
5 sent back to the DNA lab?

6 A. It was sent back to the DNA -- oh, are you talking  
7 about the resubmission?

8 Q. Well, yeah. And I am referring to the second page of  
9 Government Exhibit 5. It looks like you took custody of it  
10 at 1:38 p.m. on January 20th. You did a visual examination.  
11 And then it looks like the item was shipped back to the FBI  
12 Lab for DNA examination?

13 A. Correct.

14 Q. Why?

15 A. In order to perform a DNA analysis on the bottle cap.  
16 Prior to my accepting custody and looking at that evidence  
17 item on the 20th of January, 2012, I received a report from  
18 the FBI Lab that made reference to a -- I believe it said a  
19 plastic screw cap. I opened that evidence item to see if  
20 the screw cap that was noted was consistent with what would  
21 be found on a two-liter soda bottle, and I found that to be  
22 the case.

23 And after consultation with the prosecutors in  
24 this case, we sent that item of evidence back to be tested  
25 at the laboratory for DNA.

1 Q. When you received that information back from the FBI  
2 Lab, was that the first time that you were aware that that  
3 particular exhibit contained the bottle cap?

4 A. Yes.

5 MR. FITZGERALD: I have no further questions.

6 THE COURT: Cross.

7 **CROSS-EXAMINATION**

8 BY MR. LESSLEY:

9 Q. Yes. Agent Soule, I'd like you to keep Government's  
10 Exhibit 5 kind of handy because I want to work through that  
11 as we look at some other exhibits. You have got a paper  
12 copy of it; is that correct?

13 A. Yes.

14 Q. So we are going to work through that, but I am going to  
15 be referring to other exhibits as we talk about it.

16 A. Okay.

17 Q. And if the screens are working, I would like to be able  
18 to have some of them called up.

19 Let's begin with the very first time entry on  
20 Exhibit 5, "Collection/photographing of brick, Fanta bottle,  
21 bottle cap, flashlight documented in the CPD reports."

22 Okay. Do you see that entry there?

23 A. Yes, I do.

24 Q. Let's first talk about photographing of the bottle cap.  
25 And if we could look at -- let's look at -- if you have in

1 front of you Government's Exhibit 1, and if you look at  
2 Page 5 of 12.

3 All right. And this appears to be a portion of a  
4 of a report from Officer -- or Deputy Jeremy Parrish.

5 Do you see that page?

6 A. Yes.

7 Q. Okay. And in the very first paragraph on that page  
8 about halfway through the paragraph is the sentence,  
9 "Sergeant Van Arsdall pointed out a brick, a two-liter soda  
10 bottle, and a soda bottle cap, which I photographed and he  
11 seized as evidence."

12 A. Yes.

13 Q. Okay.

14 MR. LESSLEY: And if we could look at Defense  
15 Exhibit D, please.

16 BY MR. LESSLEY:

17 Q. This picture, I believe, is the same as one of the  
18 government exhibits. Are you familiar with this picture?

19 A. Yes, I am.

20 Q. And this picture is oriented different than the  
21 government exhibits. Your picture had the barbecue up  
22 toward the top. This one's got it off to the side.

23 But it's the same picture, right?

24 A. Yes.

25 Q. And we see under the barbecue a portion of what appears

1 like it might be a white bottle cap, correct?

2 A. Correct.

3 Q. Do you have any other pictures taken at that crime  
4 scene that show any other views of any bottle caps?

5 A. No.

6 Q. So the reference that we just saw in -- I don't know if  
7 it's Officer or Deputy Parrish's report about having  
8 photographed the bottle cap, this is the only picture we  
9 got, right, that has anything to do with any bottle cap?

10 A. As far as I am aware.

11 Q. And the bottle cap in this picture isn't like centered  
12 in the picture. It's like off in a corner, and it's only  
13 even a portion of the bottle cap under something, right?

14 A. Correct.

15 Q. Now, what we can tell in looking at that, though, is  
16 that it appears to be white in color, correct?

17 A. Yes.

18 Q. Now, let's -- and it actually appears to be kind of  
19 clean, correct?

20 A. As far as I can --

21 Q. As far as --

22 A. -- I can see from the photo, yes.

23 Q. As far as can be told from the appearance of the photo.

24 Okay. Now, still on the issue of collection and  
25 photographing of the evidence, if we could look at our

1 Exhibit A-2, please.

2 Okay. And this is a portion of a report by  
3 Officer or Deputy Van Arsdall. Again, you may have included  
4 the same page in your exhibits. I am not sure. But if we  
5 could look toward the bottom of this exhibit, in the last  
6 full paragraph, which is only two lines, the sentence, "I  
7 placed each piece of evidence into its own bag."

8 Okay? Is there a bag that is labeled "bottle cap"  
9 or any words to that effect?

10 A. No.

11 Q. There was no separate item of evidence collected at the  
12 scene in which a bottle cap was identified, correct?

13 A. Correct.

14 MR. LESSLEY: Now if we could look at A-3.

15 BY MR. LESSLEY:

16 Q. Are you familiar with this report?

17 A. Yes.

18 Q. This is an interview you did with Sergeant Van Arsdall,  
19 correct?

20 A. Correct.

21 Q. And in that interview, he reconstructs what he thinks  
22 would have been reasonable to have happened, correct?

23 A. Correct.

24 Q. The date of your interview was what?

25 A. November -- or excuse me -- September 11, 2014.

1 Q. Almost four years after the incident, correct?

2 A. Correct.

3 MR. LESSLEY: Now if we could look at Exhibit B;  
4 that is, Defense Exhibit B.

5 BY MR. LESSLEY:

6 Q. This would be the evidence report form indicating items  
7 collected by Detective Poole, correct?

8 A. Correct.

9 Q. And again, I think this was also one of your exhibits  
10 referring to JTP2, "Bag with burned residue originally  
11 holding JTP3."

12 Do you see where it says that?

13 A. Yes.

14 Q. Now, the picture that you showed us before -- let me  
15 actually refer to one of your pictures.

16 MR. LESSLEY: It would be Government Exhibit 4, if  
17 we could call that up.

18 BY MR. LESSLEY:

19 Q. Now, is it your understanding that the items in the  
20 clear transparent plastic bag labeled Q-3.1, is it your  
21 understanding that those are the burned residue items that  
22 were in that bag?

23 A. That's my understanding.

24 Q. Those burned residue items are smaller than the bottle  
25 cap, correct?

1 A. Correct.

2 Q. Now, as we look at that bottle cap in that picture, we  
3 also see a great deal of coloration on it, dark coloration.

4 Do you see that?

5 A. Yes.

6 Q. Okay. The bottle cap that was -- that we saw a portion  
7 of in the original crime scene photo was white and clean.  
8 Did we just agree on that?

9 A. Yes.

10 Q. And this bottle cap is not, correct?

11 A. Correct.

12 Q. When you inspected this bottle cap in January of 2012,  
13 did it look like it looks like in Government Exhibit 4 or  
14 did it look white and clean?

15 A. It did have some -- this is showing the top of that  
16 bottle cap. It did have some gray substance on the top.

17 Q. Well, we are also seeing some of the sides of that  
18 bottle cap in that picture, right?

19 Q. Some of --

20 A. This occurred -- this photograph was taken after it  
21 came back from the lab after it was processed.

22 Q. Understood. I am trying to ascertain the condition of  
23 it at any given time.

24 A. When I inspected it the first time, it did have some  
25 gray discoloration on the top.



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1 Q. This much?

2 A. I don't believe it was that much.

3 Q. And like I pointed out a second ago, in this picture we  
4 can also see some of the sides -- one side of the bottle cap  
5 also, can't we?

6 A. Yes.

7 Q. And it also appears gray discoloration on the side?

8 A. Correct.

9 Q. Do you recall when you inspected it in January of 2012  
10 whether it had that kind of discoloration on the sides?

11 A. I don't believe it did.

12 Q. Now, you were asked some questions a while ago about  
13 Defense Exhibit B, which is the JTP1, 2, and 3 listing.

14 But if we look at Exhibit I, that's Defense  
15 Exhibit I, we see another evidence report form, again with  
16 the JTP initials, right?

17 A. Correct.

18 Q. And this is the evidence collected at the Crawford  
19 household in the execution of that search warrant at 1:40 in  
20 the morning on 11/29, correct?

21 A. Yes.

22 Q. Okay. And JTP would be who?

23 A. James Tyson Poole.

24 Q. The same officer who collected JTP1, 2, and 3 from the  
25 crime scene or who took them from the crime scene?

1 A. Correct.

2 Q. And in fact, we even notice he uses JTP1, 2, and 3  
3 again, right?

4 A. Yes.

5 MR. LESSLEY: Now, if we could move to Defense  
6 Exhibit H-1.

7 BY MR. LESSLEY:

8 Q. And H-1 consists of a number of pages and documents.  
9 But they are FBI evidence chain-of-custody forms, right?

10 A. Yes.

11 Q. And those are the forms maintained here in Oregon.  
12 These are not FBI Lab forms, right?

13 A. Correct.

14 Q. And if we page back to the third page, we see the  
15 evidence chain-of-custody form for Item 1B3, correct?

16 A. Yes.

17 Q. And we see that Item 1B3 was received by Craig Mueller  
18 at 2:00 p.m. on November the 28th of 2010, right?

19 A. Yes.

20 Q. Okay. And then looking down at the next line, we see  
21 that he didn't log it into evidence until noon the next day,  
22 correct?

23 A. Correct.

24 Q. Is there a record, is there a document, a  
25 chain-of-custody document or any other form of record that

1 tells us where it was during the 22 hours between when  
2 Mr. Mueller collected it and when he checked it into the  
3 evidence locker?

4 A. The only record I have seen is Special Agent Mueller's  
5 reports wherein he indicates that he transports the evidence  
6 to the FBI office in Portland.

7 Q. And that would be evidence -- that would be Defense  
8 Exhibit G, if we could call that up; is that right?

9 A. Yes.

10 Q. And that's the report you were just referring to?

11 A. Correct.

12 Q. Where in this report -- and it's several pages long.  
13 It's actually two pages long. We can give you hard copies  
14 if it's easier.

15 Where in this report does it say -- oh, I see  
16 where it is. "Transporting to the Portland FBI."

17 Okay. In this list of items, he does not list  
18 1B3, correct?

19 A. Correct.

20 Q. But on the second page at the last paragraph, there is  
21 kind of a catchall paragraph, essentially saying that he  
22 himself did not process the items that are not listed there,  
23 correct?

24 A. Correct.

25 Q. Which would include 1B3?

1 A. Correct.

2 Q. Now, if we go -- I am sorry to skip around. I am kind  
3 of trying to work my way through the chain of custody.

4 If we look back at H and we see -- we go through  
5 1B1, 1B2, 1B3, the first three pages of Exhibit H, and then  
6 we look at the next two pages, and I don't know if we can  
7 call them up together.

8 MR. LESSLEY: Is it possible to put two of them on  
9 the screen?

10 I am sorry. Not -- I want the two last pages of  
11 the exhibit, both of which have 1B4 at the bottom. I think  
12 there's one other page. No. This is it. Okay.

13 BY MR. LESSLEY:

14 Q. I'd like to look at these two pages, please.

15 Both of these two pages purport to be  
16 chain-of-custody logs for 1B4, correct?

17 A. Yes.

18 Q. And yet -- and they contain, with one exception, the  
19 same information, correct?

20 A. Right.

21 Q. The difference being the bar code entry at the bottom.

22 A. Yes, the bar code appears different.

23 Q. But if we look closely at these two documents, we see  
24 that some of the signatures are also slightly different. In  
25 other words, these documents aren't copies of each other.

1 These are two separate documents.

2 Do you see where I am -- do you see that? For  
3 instance, at the very top, signature of Craig Mueller, we  
4 see different hand -- or different -- the signature looks  
5 different, correct?

6 A. Yes, it does.

7 Q. And if we look at other examples, for instance, the --  
8 *(Defendant conferred with counsel.)*

9 BY MR. LESSLEY:

10 Q. Yes. Under -- on the second line to -- on the left  
11 side under Mueller's signature, we see "to evidence" and  
12 both the "T" and the "O" and the "to evidence" appear as  
13 well as other letters in that line.

14 Do you see that?

15 A. Yes, I do.

16 Q. And so these are not the same document, right?

17 A. They don't appear to be.

18 Q. Do you know why there are two chain-of-custody logs for  
19 1B4?

20 A. No, I do not.

21 Q. Now let's keep moving.

22 If we could look at H-2.

23 This is another document that you had as an  
24 exhibit.

25 But you recognize what it is, correct?

1 A. Yes.

2 Q. I'd like to talk a little more about how this document  
3 is created. For instance, it seems to have information on  
4 it that occurred over a period of time with different dates,  
5 correct?

6 A. Correct.

7 Q. If you know how this is created, what I want to ask you  
8 is is this a document that things are added to over time, or  
9 was this a document that somebody created all at once to  
10 summarize past events?

11 I can ask that question differently if you didn't  
12 understand it.

13 A. Well, you are referring to in the description where  
14 items are added?

15 Q. Well, for instance, "Bag with burned residue that held  
16 two-liter Fanta bottle (Corvallis Police Department JTP2)."

17 Okay? We know that that event occurred on either  
18 the 28th or the 29th of November of 2010, correct?

19 A. Correct.

20 Q. The next event described in there seems to have  
21 occurred in February of 2012, correct?

22 A. Our evidence technician updates shipments and receipts  
23 from the lab in the description portion of the form.

24 Q. So I think you have answered the question I was asking,  
25 but let's make sure.

1           Is this a form that is maintained concurrently  
2 with the events happening? In other words, was the first  
3 entry made when the first event occurred and then the second  
4 entry was made when the next event occurred, or is this a  
5 summary document of past events?

6 A. The first event would have been -- if you could ask  
7 that question -- repeat that question.

8 Q. Okay. What I am trying to figure out is whether the  
9 entries that appear here were made contemporaneously with  
10 the events or whether this is a document that was created  
11 after the fact to explain past events.

12 A. It would have been, I believe, contemporaneous with the  
13 events. The first description there would have occurred  
14 when the item was initially entered into our evidence  
15 system, and then the second line there where it says,  
16 "Placed in storage as received from the FBI Lab," that would  
17 have been an update when our evidence technician received  
18 that evidence back from the lab.

19 Q. And so the "Bag with burned residue that held two-liter  
20 Fanta bottle" entry would have been made roughly  
21 concurrently with the receipt of the item from the Corvallis  
22 Police Department?

23 A. Correct.

24 Q. And is it your understanding that the information, "Bag  
25 with burned residue" would have been taken from the

1 Corvallis Police Department documentation, or would this  
2 have been an independent inspection of the item?

3 A. It would have been taken from the Corvallis Police  
4 Department documentation.

5 Q. And what is the mechanism for checking to make sure the  
6 information is correct?

7 A. With regard to the description?

8 Q. Yes.

9 A. Well, if the evidence item is sealed and there isn't a  
10 reason for us to break that seal, we would accept the  
11 description that the Corvallis Police Department assigned to  
12 it on face value.

13 Q. Well, I was really more just asking whether there's  
14 some check to make sure that whoever is entering this  
15 information enters it correctly.

16 Is there anybody who independently checks it and  
17 initials it to make sure that it's been done right?

18 A. No.

19 Q. All right. So if we could look at H-3.

20 Do you recognize what this document is?

21 A. It's, again, another evidence record FD-1087.

22 Q. And what I believe this record is is a record of the  
23 movement of the Cody Crawford DNA samples, known samples.  
24 Okay? Let me back up and make that several questions.

25 There was a swab taken from Cody Crawford pursuant



1 to a search warrant in the days or so after the fire,  
2 correct?

3 A. Yes.

4 Q. And that swab was transmitted to the FBI Lab, correct?

5 A. Yes.

6 Q. And then that swab, after the flashlight was tested,  
7 was transferred back to the FBI in Oregon, correct?

8 A. I don't -- I don't know that to be a fact.

9 MR. LESSLEY: Okay. Let's look back at the  
10 previous exhibit, please, H-2. And it would be one, two,  
11 three -- it would be the fourth page of H-2. No. The next  
12 page after that, I think. I might have miscounted. Keep  
13 going. Keep going. Keep going. I believe it is H-2. One,  
14 two, three, fourth page of H-2. That's not what I have.

15 I apologize. It's possible I got a page out of  
16 order.

17 I apologize. That was -- I apparently got a  
18 document out of order. I am told that it's 04. Let me make  
19 sure that I am -- that's not it. Okay. Let's pull it up  
20 now. That's the document.

21 BY MR. LESSLEY:

22 Q. So do you see this document that's in front of you --

23 A. Yes.

24 Q. -- on the screen.

25 It has an entry on 3/16/2012, and this appears to

1 be an FBI Laboratory document, correct?

2 A. Yes.

3 Q. "Spoke with Special Agent Soule. Asked him to  
4 send back K-5 and the DNA extract tubes."

5 Okay?

6 "Informed him of preliminary DNA results.

7 Stated we needed to run one more test on K-5."

8 Does that refresh your recollection about whether  
9 you sent the DNA tubes back to the FBI Lab after you sent  
10 the bottle cap?

11 A. Our evidence technician would have -- would have sent  
12 those items, but I would have relayed the information that I  
13 received in that request to her to send that back.

14 Q. Well, I am perhaps testing your memory, and I apologize  
15 for that, but do you recall the sequence of events being  
16 that the Crawford known DNA sample that was taken within  
17 days after the fire was sent to the FBI Lab?

18 A. Yes.

19 Q. That it was used by them in their processing when they  
20 tested the flashlight. That it was then -- that the samples  
21 were then sent back to the FBI in Oregon and that you were  
22 then asked to send them back to the FBI after you sent the  
23 bottle cap?

24 A. That appears to be the case based on this report.

25 Q. Okay. Now, kind of a long-winded way of getting to the

1 question I was going to ask, which is if we could look,  
2 please, at the document I had before, H-3, this would be the  
3 Oregon evidence log showing, apparently, the receipt back  
4 from the FBI Lab of those samples, right? Can you tell?

5 We can move on if it's -- it's not a big point.  
6 We can move on if you can't tell.

7 A. Yeah. I can't tell.

8 Q. All right. Now, looking at Exhibit I, this we looked  
9 at a while ago. These are the -- this is the evidence  
10 report form of the items that Detective Poole recorded from  
11 the search warrant execution of the Crawford house and  
12 garage, correct?

13 A. Yes.

14 Q. And we see that JTP4 and JTP6 are both swabs taken from  
15 Cody Crawford's hands, correct?

16 A. Yes.

17 Q. Those were taken by the detectives and received by  
18 Detective Poole on the 29th at 1:40 a.m., correct?

19 A. Yes. That's when the search was executed, so sometime  
20 shortly thereafter.

21 Q. Right. Fair enough. Date and time to evidence locker,  
22 1/29 at 3:30, which I would take to be 3:30 a.m., correct?

23 A. Yes.

24 Q. And do you know, if you do, what became of these items,  
25 JTPs 1 through 17, in terms of their transmittal to the FBI

1 and from there -- from the FBI in Oregon to the FBI in  
2 Quantico?

3 A. I know some of the search warrant evidence -- at  
4 least -- I believe some of the search warrant evidence was  
5 sent back to the -- I am trying to think back now whether or  
6 not we did send any evidence other than the swabs of the --  
7 buccal swabs. I would have to look through the chains of  
8 custody to see if any items were sent from the search of the  
9 residence. I know some items from the search of the garage  
10 were sent back to the lab for examination.

11 Q. All right. Well, I won't put you on the spot. If you  
12 would look at those, and perhaps we can have some further  
13 communication about those.

14 A. Okay.

15 Q. All right.

16 MR. LESSLEY: If I can have one more moment.

17 I believe those are my questions.

18 Thank you, Agent Soule.

19 MR. FITZGERALD: No further questions.

20 THE COURT: May this witness be excused?

21 MR. FITZGERALD: Yes.

22 THE COURT: You may stand down.

23 Now we have the video conference.

24 MR. LESSLEY: Well, Your Honor, in terms of  
25 excusing him, I understand he intends to remain here. If he

1 should come up with the answer to my last question in the  
2 next bit of time, I wouldn't mind recalling him, but --

3 THE COURT: I understand.

4 MR. LESSLEY: Thank you.

5 MR. FITZGERALD: Okay. At this time the  
6 government is calling Amber Carr.

7 THE COURT: Okay. While that's getting set up,  
8 we'll take a break.

9 Right? You need some time, right?

10 THE CLERK: Yes. Thank you.

11 *(Recess.)*

12 THE COURT: Please be seated.

13 Are we all set up?

14 THE CLERK: We should be all set up.

15 MR. FITZGERALD: May I have the witness sworn in,  
16 please.

17 THE CLERK: Sorry. I apologize. Please --

18 THE COURT: I have the courtroom on mine.

19 THE CLERK: Do you? Okay. One moment.

20 *(The courtroom deputy conferred with the court.)*

21 THE CLERK: Can you see the witness?

22 THE COURT: Um-hmm.

23 THE CLERK: Fantastic.

24 Okay. Please raise your right hand.

25 *(The witness was sworn.)*

1 THE CLERK: Please state your full name and spell  
2 your last name for the record.

3 THE WITNESS: My name is Amber Carr, and my last  
4 name is spelled C-A-R-R.

5 **DIRECT EXAMINATION**

6 BY MR. FITZGERALD:

7 Q. Ms. Carr, good morning. This is Bud Fitzgerald. I am  
8 the Assistant United States Attorney representing the  
9 government in this case.

10 First question: What is your current occupation?

11 A. Currently I am a supervisory biologist in the DNA  
12 Support Unit, which is part of the FBI Laboratory based out  
13 of Quantico, Virginia.

14 Q. What are your responsibilities as a forensic examiner  
15 at the FBI Lab?

16 A. Well, previously as a forensic examiner, it was my  
17 responsibility of when a case came into the unit to  
18 determine what items to test in that case as well as what  
19 tests to actually perform on those items of evidence.

20 I would then direct a biologist to perform those  
21 tests. Then I would review all the results and put my  
22 conclusions in the format of a report and then testify as  
23 needed.

24 Q. How long have you been employed by the FBI?

25 A. For about ten and a half years now.

1 Q. Can you tell the court what positions you have held  
2 during that ten-year period?

3 A. Well, currently I am a supervisory biologist in the DNA  
4 Support Unit where I am over both the quality and the  
5 training aspects for both the DNA Caseworking Unit as well  
6 as the Federal DNA Database Unit.

7 Prior to that, I was a forensic examiner in the  
8 Nuclear DNA Unit, where I also held Missing Person Program  
9 responsibility. And I was in that position for about six  
10 years.

11 And then prior to that, I was a biologist, a  
12 forensic biologist, where I actually performed the testing  
13 in the laboratory, both on items for serology as well as  
14 performing DNA extraction.

15 Q. Have you received any specialized training in order to  
16 become a forensic examiner?

17 A. Yes, I did. I actually went through a two-year  
18 training program where I was paired with a senior forensic  
19 examiner to basically mentor me and show me the ropes of how  
20 to do the job.

21 Then at one point the roles reversed where I did  
22 the job under their supervision.

23 Throughout this time, I also went through a series  
24 of oral examinations and moot court examinations in the  
25 areas of serology, DNA analysis, as well as population

1 genetics and statistics.

2 Q. Can you tell the court about your background -- your  
3 educational background.

4 A. I have a bachelor's degree in biochemistry from  
5 Virginia Tech as well as minors in both chemistry and  
6 biology. I also have a master of science in forensic  
7 science with a DNA concentration from Marshall University.

8 Q. How do you stay current in your field?

9 A. I stay current through reading literature as well as  
10 journal articles, which I am actually required to do, at  
11 least on a quarterly basis, as well as also attending  
12 seminars or conferences in the field of DNA.

13 Q. Have you lectured or presented in the fields of  
14 forensic serology and/or DNA analysis?

15 A. Yes, I have had the opportunity to teach several  
16 classes to FBI special agents who are going through the  
17 evidence response team and teach them on how to collect DNA  
18 evidence as well as the collection of blood and bodily  
19 fluids.

20 Q. What is SWGDAM?

21 A. SWGDAM stands for the Scientific Working Group on DNA  
22 Analysis Methods.

23 Q. And can you tell the court what that organization does?

24 A. That organization is made up of individual members,  
25 about 25, that are members through local, federal, as well



1 as state and some international that all have DNA emphasis.  
2 So they are part of the DNA community.

3 That organization is also responsible for updating  
4 the quality assurance standards that all DNA laboratories  
5 must follow as well as any other newer technologies and  
6 writing guidelines that are associated specifically with the  
7 field of DNA and forensic DNA.

8 Q. Do you have any personal experience with SWGDAM?

9 A. I was an invited guest for about two years,  
10 specifically for my missing person involvement, where I did  
11 help write the missing person guidelines that were published  
12 last January.

13 MR. FITZGERALD: Your Honor, at this time I am  
14 going to move to recognize Ms. Carr as an expert in the  
15 field of forensic serology and DNA analysis as well as FBI  
16 testing procedures.

17 MR. LESSLEY: I don't object, Your Honor.

18 THE COURT: So noted as the expert.

19 Go ahead.

20 BY MR. FITZGERALD:

21 Q. Ms. Carr, what is DNA?

22 A. DNA stands for deoxyribonucleic acid, and it's the  
23 basic building blocks that are found in virtually every cell  
24 of the body. You actually inherit your DNA from both your  
25 mother and your father, where you get half your DNA from

1 your mom and half your DNA from your dad, which makes each  
2 individual a unique individual with the exception of  
3 identical twins. They actually have the same DNA type.

4 Q. Can you generally describe the procedure that you use  
5 to develop a DNA profile?

6 A. In order to develop a DNA profile, the first thing that  
7 we would do is to either take a cutting, such as something  
8 from the bloodstain or a swabbing of potential skin cells  
9 from an item of evidence, and put that cutting or that  
10 swabbing into a tube.

11 The next step is to actually add chemicals where  
12 those chemicals help to break open the cells that house the  
13 DNA in order to release that DNA and isolate it. We call  
14 that process the extraction procedure.

15 After that, we want to find out how much DNA is  
16 actually in each sample, and we do this through a process  
17 that we call quantification.

18 The final step is to isolate specific regions in  
19 the DNA that are different between each individual, and  
20 those are called STRs or short tandem repeats. We  
21 specifically target those STRs in the DNA and make many  
22 copies of those through a process called polymerase chain  
23 reaction or PCR.

24 That sample or those samples are then put onto an  
25 instrument that separates the DNA where we obtain the DNA

1 profile from each item of evidence.

2 Q. After developing a profile, what are your conclusions?

3 A. Well, after you develop a profile from your DNA from  
4 your evidence, you also are similarly developing a DNA  
5 profile from a reference item or -- such as the bloodstain  
6 or a cheek swabbing from an individual where you knew where  
7 it came from.

8 We compare the two. We compare the DNA from the  
9 evidence item to the DNA from the reference sample, and you  
10 draw one of three conclusions. If they are different, then  
11 that's an exclusion. If they match, so the DNA is the same  
12 from the evidence sample that is from the reference sample,  
13 then we call that a match or an inclusion. Or if there's  
14 not enough DNA there, we call that an inconclusive;  
15 therefore, we were not able to make any kind of conclusion  
16 from that.

17 Q. How do you know that the results you get are reliable?

18 A. Well, we follow procedures or protocols during every  
19 step of our process. We also use things called controls,  
20 both a positive control and a negative control, where for  
21 the positive control we know the outcome and expect a  
22 certain outcome and for the negative controls we expect to  
23 see nothing. That also tells us that our procedures worked  
24 and that our chemicals worked properly.

25 We also do a set of reviews. At the end of every

1 case, every case gets reviewed by not only the examiners  
2 that did the report but another qualified examiner.

3 We follow the quality assurance standards that are  
4 set forth by the FBI and that all DNA labs must follow, and  
5 we are actually audited for those on an annual basis.

6 Q. You mentioned the word protocol. What is a protocol?

7 A. Well, in short, a protocol is similar to a cookbook.  
8 It's going to provide step-by-step instructions on each step  
9 of the process, and that's what we follow from start to  
10 finish when we are examining any items of evidence or any  
11 reference sample.

12 Q. Do you follow protocols in your laboratory?

13 A. Yes, we do.

14 Q. What is a proficiency test?

15 A. A proficiency test is a test that is provided to us by  
16 an outside provider where we put that -- those samples  
17 through our process that we would any normal or regular  
18 sample, and then we provide our results back to that outside  
19 agency, where they are basically showing that our procedures  
20 worked properly and that we got the correct answers.

21 Q. Have you taken any proficiency tests while working at  
22 the FBI Laboratory?

23 A. Yes, I have. I take normally two at least annually.

24 Q. Have you ever made an error in a proficiency test?

25 A. No, I have not.

1 Q. Is your unit audited regularly?

2 A. Yes, we are. We are audited at least annually to the  
3 quality insurance standards that I spoke of earlier.

4 Q. And what -- when you use the word -- when you refer to  
5 audit, what does that mean?

6 A. When I refer to audit, these audits are kind of all  
7 encompassing from -- they capture things like personnel,  
8 training, and qualifications through your standard operating  
9 procedures to ensure that you are following those; evidence  
10 controls to maintain that your facility is adequately  
11 storing evidence and securing evidence. It also involves  
12 like evaluating the instrument maintenance and records for  
13 reagents and how we make reagents and how we keep and track  
14 those reagents.

15 We also review the procedures that we do for -- or  
16 that we follow for reporting and ensuring that they go  
17 through the correct process and making sure that each report  
18 actually does get the review that it needs.

19 Q. Did the FBI Laboratory examine or test any evidence  
20 pertaining to the case before the court?

21 A. Yes, we did.

22 Q. Specifically, did the FBI Laboratory examine or test  
23 evidence which has been referred to as Q3?

24 A. Yes, we did.

25 Q. What is Q3?

1 A. Q3 was the bottle cap.

2 Q. And did the FBI Laboratory also examine or test  
3 evidence referred to as Q12?

4 A. Yes, we did.

5 Q. What is Q12?

6 A. Q12 is referred to as the Maglite.

7 Q. What examinations were performed on Q3?

8 A. That item was -- a swabbing was taken from both the  
9 inside and outside portion of Q3, and then that swab was  
10 taken on through the extraction, quantification, and that  
11 PCR amplification procedure in order to maintain what the  
12 DNA type was.

13 Q. And what were the results?

14 A. Do you mind if I refer to the report for that?

15 Q. No.

16 A. The Q3 results were that the DNA type, the  
17 single-source DNA type matched the DNA type that was given  
18 from Mr. Crawford, and then random match probabilities were  
19 calculated in this instance where it was 1 in 1.1 million in  
20 the African-American population, 1 in 3.5 million in the  
21 Caucasian population, 1 in 5.9 million in the Southeastern  
22 Hispanic population and 1 in 54 million in the Southwestern  
23 Hispanic population.

24 And what a random match probability is is the  
25 probability of selecting an unrelated individual at random

1 whose DNA type matches the DNA type found on the evidence.  
2 It's basically telling you how common or how rare that DNA  
3 profile is from the evidence.

4 Q. Did you also perform examinations on Q12?

5 A. Yes, we did.

6 Q. What kind of examination did you perform on Q12?

7 A. We also swabbed areas of the Mag flashlight for  
8 potential skin cells that were left behind and then a DNA  
9 extraction, quantification, and that PCR amplification were,  
10 again, done for Item Q12.

11 Q. And, again, referring, if you wish, to any reports that  
12 you have there available, what were the results?

13 A. The results for Item Q12 were that there was DNA  
14 present from at least two individuals. So it was compared  
15 back to Mr. Crawford's DNA sample, and Mr. Crawford was  
16 potentially the major contributor of the DNA from Specimen  
17 Q12 with the random match probabilities being 1 in 2 million  
18 in the African-American population, 1 in 3.7 million in the  
19 Caucasian population, 1 in 1.8 million in the Southeastern  
20 Hispanic population, and 1 in 3.9 million in the  
21 Southwestern Hispanic population.

22 Q. I am going to ask a few questions about Q3.

23 Do you have all of the government exhibits  
24 available to you there?

25 A. I do.

1 Q. I am going to direct your attention to Government  
2 Exhibit 10. That's the declaration of Mark Whitworth.

3 A. Okay.

4 Q. Have you examined that declaration?

5 A. Yes, I have.

6 Q. Have you drawn any conclusions about the accuracy of  
7 that declaration by looking at the FBI Lab records  
8 referenced in that declaration?

9 A. The declaration is accurate.

10 Q. And what is your opinion regarding the lab's compliance  
11 with protocol as to Q3?

12 A. The laboratory followed our laboratory procedures for  
13 that item.

14 Q. Were you able to find any irregularities in the  
15 adherence to protocol with regard to Q3?

16 A. No, I was not.

17 Q. Now with regard to Q12, I am going to direct your  
18 attention to Government Exhibit 11. That is the declaration  
19 of Jade Gray.

20 Have you examined that declaration?

21 A. Yes, I have.

22 Q. Have you also looked at the FBI Lab records referenced  
23 in that declaration?

24 A. Yes, I have.

25 Q. Have you made any conclusions about the accuracy of



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1 that declaration?

2 A. Ms. Gray's declaration is accurate.

3 Q. And what is your opinion regarding the lab's compliance  
4 with protocol as to Q12?

5 A. The laboratory followed the FBI Laboratory protocol for  
6 Item Q12.

7 Q. And were you able to find any irregularities?

8 A. No, I was not.

9 Q. Could you please specifically address the taking of  
10 swabs on Q12 and the testing of those swabs.

11 A. Item Q12 was first looked at by the DNA Unit on  
12 December 27th, and I believe -- was that 2011 or was that  
13 2010? It's December 11th -- or December 27th, 2010.

14 From that, the biologist collected two swabbings  
15 on that date. One of the swabbings she processed and went  
16 through the extraction procedures. The other swab was put  
17 into a point envelope and was returned to our Case  
18 Administration Group on December 27th, 2010.

19 Q. If you know, what happened to the flashlight itself?

20 A. The flashlight itself was returned -- let me check my  
21 date. The flashlight itself was returned to the Explosives  
22 Unit on January the 3rd, 2011.

23 Q. I am going to direct your attention to Government  
24 Exhibit 13, if you have it there in your packet of  
25 materials.

1 A. Yes, I do.

2 Q. What is Government Exhibit 13?

3 A. Government Exhibit 13 is part of our case records for  
4 the Nuclear DNA Unit. It's specifically the Dilution and  
5 Merge Notes for Laboratory No. 101130010.

6 Q. And can you explain to the court, to all of us, what  
7 this form indicates.

8 A. What this form indicates is when the samples from the  
9 Q12 -- there were two swabbings collected. The first  
10 swabbing was actually processed through the extraction  
11 procedure on December 27th, 2010.

12 The second swabbing was processed through the  
13 extraction procedure on January the 7th, 2011. At this  
14 time, at the end of the extraction procedure, the two  
15 extracts were combined. This page, this Dilution and Merge  
16 Notes show the date at which that was done. So the sample  
17 from Q12-1a and the sample from Q12-1b were combined into  
18 one sample and given a different tube ID.

19 MR. FITZGERALD: Thank you. I have no further  
20 questions.

21 THE COURT: Mr. Lessley.

22 **CROSS-EXAMINATION**

23 BY MR. LESSLEY:

24 Q. Ms. Carr, I introduced myself briefly a while ago. I  
25 am Bryan Lessley. Excuse me. I didn't have my microphone

1 on.

2 I introduced myself a while ago. I am Bryan  
3 Lessley. I am Mr. Crawford's lawyer. I don't know what  
4 view you have. Mr. Crawford is seated next to me if you  
5 have a view of the courtroom. Can you hear me, Ma'am?

6 A. Yes, I can. I can hear you and I can see you.

7 Q. Okay. Good. Let's start by talking about Q3.

8 And I believe that you have the defense exhibits;  
9 is that correct?

10 A. I do, yes.

11 Q. And you have got them in hard copy, so we can just look  
12 at hard copies.

13 MR. LESSLEY: And Your Honor, unfortunately,  
14 because we are using the video screens for testimony, we  
15 need to, all of us, look at hard copies.

16 BY MR. LESSLEY:

17 Q. I'd like to start with Defense Exhibit L. And in  
18 particular, I'd like to look at Page 3 of Exhibit L, which  
19 appears to be an examination of Item Q3 within the  
20 Explosives Unit.

21 And it has a handwritten indication that Q3  
22 "contains melted" -- excuse me -- "contains  
23 plastic melted pieces and a screw top plastic  
24 bottle top. Checked with nDNA Examiner Eberts and  
25 was advised that it would not be a good DNA

1 source."

2 Now, let's -- first of all, who is nDNA Examiner  
3 Eberts?

4 A. Well, the nDNA stands for the Nuclear DNA Unit.

5 Q. Right.

6 A. And Examiner Eberts is the same as Examiner Gray.

7 Q. All right. And at the time, was she in some supervisor  
8 capacity within the Nuclear DNA Unit, if you know?

9 A. Um, no, she was not.

10 Q. What are the reasons, if you know, why she would tell  
11 anybody that the bottle cap would not be a good DNA source?  
12 What possible reasons would there be why a bottle cap  
13 wouldn't be a good DNA source?

14 A. Well, potentially for bottle caps you don't always  
15 leave behind a lot of DNA.

16 Q. All right.

17 A. For someone who would have either drank from it or for  
18 someone who would have touched it.

19 It also -- depending on the situation, there was  
20 indications that there was melted plastic, and if it had  
21 been exposed to high heat, that is also a deterrent for DNA.

22 Q. Why would it be a deterrent for DNA?

23 A. Well, when DNA is exposed to high heat, it's going to  
24 break down the DNA, and therefore, you are less likely to  
25 actually get any full DNA profiles from items exposed to

1 extreme high heat.

2 Q. And why would a bottle cap be a questionable DNA  
3 source? It seems like if somebody is drinking it, they'd  
4 have their hands on it all the time screwing it on and off.

5 A. Well, I think it's more about the matter of we don't  
6 always get great sources of DNA from items of evidence like  
7 that, especially when they have been exposed to either  
8 elements or extreme temperatures.

9 Q. And so exposure to elements and temperatures would tend  
10 to do what? It would tend to degrade, damage, injure any  
11 DNA that might be on the item?

12 A. All of the above, yes.

13 Q. Now, continuing on the subject of Q3, if we could look,  
14 please, at -- and I am going to ask you to do this, and I am  
15 afraid we are all going to have to do this -- Exhibit N,  
16 Exhibit O-1, and Exhibit O-2. Those are three pages that  
17 are sequential to each other.

18 A. I am sorry. Did you say N?

19 Q. N as in "no."

20 A. Okay.

21 Q. Then O-1 and O-2.

22 Now, these all appear to be letters dated  
23 February 10th, 2012, and they all appear to be from the FBI  
24 Laboratory Division, and they all purport to deal with Item  
25 Q3.

1           Do you see that all three of those letters have  
2 those things in common?

3       A.    I do, yes.

4       Q.    And in fact, they all say that the specimen was  
5 received February 9th, 2012, by the FBI Lab, which I think  
6 the evidence would show that that's true. Yet all three of  
7 the letters are different.

8       A.    Yes, they are actually all three different and  
9 different dates marked on them. They are all the laboratory  
10 worksheets, but there are addendums to each.

11       Q.    Okay. Well, looking first at Exhibit N, we see that  
12 one having just Q3 bag and screw top with a further  
13 description with some numbers on it, correct?

14       A.    Yes.

15       Q.    Okay. And then above that, we see received in CAG, Q3,  
16 with some initials I can't really read, but they seem to say  
17 2/12/12 or 2/10/12.

18       A.    Correct.

19       Q.    And then we see ACH with some other initials and  
20 another date, correct?

21       A.    That is correct. This is our worksheet that our unit,  
22 the Nuclear DNA Unit, receives when those items were  
23 submitted to us into our unit.

24       Q.    And then we look at O-1, which has the same date but  
25 now has Q3 and Q3.1.

1 Do you see those things?

2 A. I do.

3 Q. And if we look under lab number, it doesn't have any of  
4 the handwriting, but it does have the typewritten or word  
5 processed capital A, capital C, capital M there, correct?

6 A. That is correct. The difference between is that the  
7 initials on Exhibit N are handwritten ACH.

8 Q. Right.

9 A. And then the Exhibit O-1 are typed ACM.

10 Q. Correct.

11 A. They stand for different individuals.

12 Q. And then looking at O-2, we are back to seeing the ACH  
13 handwritten, but it's different initials and a different  
14 date.

15 A. That is correct. The ACH -- Exhibit O-2 is also one of  
16 the Nuclear DNA Unit worksheets. The ACH, which stands for  
17 Ms. Eberts or Ms. Gray at this point, she actually -- those  
18 are her initials and the date that she actually wrote that.  
19 And it says updated by her on the date 3/1/12.

20 Q. And we also see -- I am sorry. I didn't mean to cut  
21 you off. She also initialed that one in the lower right  
22 corner, correct?

23 A. That is correct, yes, she did.

24 Q. As she did with Exhibit N, correct?

25 A. That is correct.

1 Q. Okay.

2 A. Those are part of our case files, yes.

3 Q. But my question is more one of documenting a  
4 recognizable trail of work that was actually done.

5 And is it the practice of the FBI Laboratory to  
6 have multiple copies of the same letter with the same date  
7 that appear to be revised and initialed --

8 A. The last --

9 Q. -- by different people at different times?

10 THE COURT: Wait, wait. Stop. Stop. Stop.  
11 Stop.

12 Go back. Rephrase your question, Mr. Lessley.

13 BY MR. LESSLEY:

14 Q. I'm trying to figure out the sequence by which these  
15 letters could have worked because -- let me ask a couple of  
16 questions to try and introduce the real question.

17 Is it considered to be good laboratory practice to  
18 have a defined document trail so that steps that are taken  
19 can be retraced later?

20 A. Yes, definitely.

21 Q. Okay. And so that the work that is done can be  
22 documented for future reference without having to rely on  
23 people's individual memories or reconstructed memories from  
24 later but you create a document trail at the time, correct?

25 A. That is correct, yes.



1 Q. So I am trying to figure out how these three letters  
2 could work in sequence. And so I have got a couple  
3 questions about that.

4 Exhibit N, which lists only Q3 and not Q3.1, has  
5 some initials on it dated February -- February -- what  
6 appear to be February 10th and February 13th, correct? And  
7 they are initialed at the lower right by Ms. Eberts, now  
8 Ms. Gray, correct?

9 A. That's correct, yes.

10 Q. Okay? And you said this is a worksheet within the  
11 Nuclear DNA Unit. Okay? Correct? Correct?

12 A. Yes. This worksheet was given to us in the Nuclear DNA  
13 Unit when this item of evidence was received into the  
14 Nuclear DNA Unit --

15 Q. But then I look at O --

16 A. -- indicated by the received at CAG.

17 Q. Got it. Received at CAG is -- you told us what CAG was  
18 a minute ago. Say it again. CAG means what?

19 A. The Case Administration Group.

20 Q. Okay. And that's within the Nuclear DNA Unit, correct?

21 A. That is correct, yes.

22 Q. Okay. Now look at O-2, and O-2 is the one that has the  
23 updated information on it, updated 3/1/12, okay, with  
24 another initial, it's 3 something 12, again with Ms. Eberts'  
25 initials at the lower right corner. All right? Correct?

1 Do you see all that?

2 A. Yes, that's correct.

3 Q. Yet this letter, O-2, is not updated from N. O-2 is a  
4 copy of O-1 that has been revised, correct?

5 A. I actually -- no, that is not correct.

6 Q. Okay. So what's wrong with that?

7 A. So because this was done in our unit, N was the initial  
8 paperwork generated when we received this item. J,  
9 Ms. Eberts or Ms. Gray, actually printed and updated.  
10 That's why she wrote updated JEE on Item O -- or Exhibit  
11 O-2.

12 Q. All right.

13 A. She printed this on this March the 1st, 2012.

14 Q. Okay.

15 A. She printed the updated copy because we are required to  
16 have an updated copy in our case file of the laboratory  
17 worksheet.

18 Q. Right. But the laboratory worksheet she updated isn't  
19 O-1. It's N, isn't it?

20 A. That is correct.

21 Q. Let me ask that differently.

22 A. Yes.

23 Q. Okay. But O-2 has both Q3 and Q3.1 listed on it, which  
24 N doesn't, correct?

25 A. Yes. And it was generated by someone else, whoever ACM

1 is, which is going to be in another unit, not in the Nuclear  
2 DNA Unit.

3 Q. So what I am trying to figure out is the sequence of  
4 events and movements of the objects and who updated this  
5 letter at what particular point in time and where it went  
6 from there.

7 How do you do that?

8 A. You do that by following the tracking date. The  
9 worksheet is an item that does continually get updated  
10 because as items of evidence get worked in the different  
11 units, the different units are required to update the  
12 worksheet in order to most accurately reflect what is the  
13 item of evidence that they have. So if they discover  
14 something upon examination, that needs to be added to the  
15 worksheet, which is what happened in this case.

16 Q. My question is more related to how do you look at these  
17 three documents and tell what order they came in and who did  
18 what?

19 A. Well, these three documents are -- two of them are from  
20 the same unit. The third is irrelevant to this unit.

21 Q. And yet that document came into your unit and was  
22 revised by your unit, correct?

23 A. Yes, the worksheet. We revised the worksheet to add  
24 Q3.1, the melted piece of plastic.

25 Now, after it left our unit, I don't know what

1 happened to it.

2 Q. All right. So what we have is a received on your unit  
3 on February -- looks like the 13th or maybe the 10th of  
4 2012. And then we have your unit revising it on March the  
5 1st, correct?

6 A. That was the date that she printed that updated  
7 worksheet; not necessarily the date that it was revised.

8 Q. Okay. Fair enough.

9 Now, if we could take a look at Exhibit M, please.  
10 You have said that -- I believe you said that O-1 was done  
11 by another unit, correct?

12 A. Yes.

13 Q. Okay. If we could look at Exhibit M, and it's two  
14 pages, could you show me where, between February the 10th of  
15 2012, and the end of March 2012, Q3 ever went to another  
16 unit?

17 A. Q3 entered the Nuclear DNA Unit on February the 10th,  
18 2012.

19 Q. Correct.

20 A. It did not leave our unit until April 11th, 2012.

21 So your question is is who -- did another unit  
22 update the worksheet? I am sorry. That wasn't the  
23 question.

24 What was your question?

25 Q. My question is how could another unit have updated the

1 worksheet between February the 10th and the end of March if  
2 the item never went to another unit during that period of  
3 time?

4 A. Well, I don't know at what date that other unit updated  
5 the worksheet because the February 10th date is the date  
6 that that worksheet is generated; not showing what dates any  
7 updates were made.

8 Q. Okay.

9 A. That's why it did not change throughout the whole  
10 worksheet.

11 Q. But it did change. If you look at the difference  
12 between N and O-1, you see that the description of the items  
13 changed, correct?

14 A. Oh, yes. I agree.

15 Q. And if you look at O-1 and O-2, you see that O-2 has  
16 the same description as O-1.

17 A. Actually, it does not.

18 Q. Took out the word "your."

19 A. No. For Q3 for O-1 it's described as screw top.

20 Q. Oh, you are right.

21 A. For Q3 for O-2, it's described as bag and screw top.

22 Q. All right. Fair enough. All right.

23 You don't know what other units might have been  
24 responsible for the revisions in O-1?

25 A. I would have to find out what -- who ACM is.

1 Q. All right. Now, let's -- give me a second here before  
2 I move on. Let's take a look at Exhibit K.

3 Okay. This is not -- do you have Exhibit K there?  
4 I will wait for you.

5 A. I do. I have K.

6 Q. Okay. So K is not a Nuclear DNA internal unit  
7 document, is it?

8 A. No, it is not. This is the FBI Laboratory chain of  
9 custody.

10 Q. Correct. All right. And so if we look at the history  
11 of the movement of Q3, we see that Q3 first appears in an  
12 entry on 12/7/10, correct?

13 A. Yes, that's correct.

14 Q. Okay. And those appear to be a movement within the EU,  
15 which I understand to be Explosives Unit. Is that --

16 A. Yes, that's correct.

17 Q. Okay. So the next entry we see for Q3 after this  
18 movement within the Explosives Unit is on Page 3 of that  
19 document in which Robert Rooney of the Explosives Unit gives  
20 it to somebody whose initials begin with J, correct?

21 A. Yes, that is what I also see.

22 Q. Now I'd like you to compare the two entries we just  
23 looked at, the bottom entry on January the 7th -- excuse  
24 me -- December the 7th of 2010, with the top entry on Page 3  
25 of February 23rd, 2011.

1           It appears to be that the chain of documentation  
2     for Q3 is that the person whose initials begin with J gave  
3     it to someone whose initials begin with M, what appears to  
4     be an M, on December the 7th, and then roughly 16 days  
5     later, Robert Rooney gives it back to the person with J,  
6     correct?

7     A.    Yes, that is what it appears to be.

8     Q.    Where does it ever show that the person with M ever  
9     gave it to Mr. Rooney or that it went anywhere -- what does  
10    it show how Rooney got it or what M did with it?

11    A.    This chain of custody does not show that.

12    Q.    Okay. And so a while ago when you said that in  
13    reviewing the chain of custody of these items you were  
14    unable to find any irregularities, this would appear to be  
15    an irregularity, wouldn't it?

16    A.    I believe Mr. Whitworth actually spoke of this in his  
17    declaration.

18    Q.    All right. Let's take a look. That would be  
19    Government's Exhibit 10. And the only entry I see regarding  
20    Q3 -- well -- is either Paragraph 3 or Paragraph 6, but  
21    Paragraph 6 relates to later dates.

22           So where does he explain the incongruity I just  
23    mentioned?

24    A.    I am sorry. Just one second. I was going to review  
25    this.

1 Q. Sure.

2 A. So what I believe is there is a potential -- there is a  
3 missing portion of the chain of custody because in his  
4 declaration he -- Mr. Whitworth speaks of Specimen Q3 that  
5 was assigned to the Explosives Unit, the Chemistry  
6 Examination Group, on December the 7th, 2010, for  
7 examination and then was returned to the Explosives Unit  
8 Device Examination Group from the Chemistry Examination  
9 Group on February 23rd, 2011.

10 Q. I was waiting. You were looking at some records. Did  
11 you --

12 A. That is correct. What I had said earlier is that  
13 Mr. Whitworth's declaration is accurate to what is reflected  
14 on the chain of custody.

15 Q. Correct. All right. But the chain-of-custody log  
16 appears to be incomplete in terms of documenting who had a  
17 particular item of evidence for two weeks, correct?

18 A. It does appear that Item Q3 was given to someone that  
19 starts with an M on December 7th, 2010, and that that same  
20 item came from Mr. Robert Rooney back to Mr. Evans on  
21 12/23/2011 [sic].

22 Q. Now I'd like to look further at the movements of Q3  
23 starting with that third page of Exhibit K that you have got  
24 in front of you, starting with the February 23rd, 2011,  
25 date. Okay?



1           It appears that on that date, Q3 and other items  
2       were delivered by Mr. Rooney to the person whose initial  
3       begins with J on February 23rd, 2011, right? Correct?

4       A.    Yes, correct.

5       Q.    And it looks like that person whose initial begins with  
6       J didn't return Q3 until November the 4th of 2011, right?

7       A.    Yes, that is correct.

8       Q.    So basically for a period of between eight and nine  
9       months, this person with the initials J was the person in  
10      possession of the item, correct?

11      A.    Yes.

12      Q.    Let's move to Q12. And for Q12, let's take a look at  
13      Exhibit T-1.

14           Now -- yeah, I will wait until you get there.

15      A.    Okay. I am there.

16      Q.    Okay. First I want to identify what -- the meaning of  
17      some of the terminology that appears on this form. We agree  
18      that Q12 is the Maglite, right? And the description appears  
19      at the top, correct?

20      A.    Yes, that is correct.

21      Q.    So explain what the -- and then we look under Specimen  
22      Q12-1. We see the term "cutting." What does that mean?

23      A.    Cutting is just the item description that was collected  
24      from the initial Q12.

25      Q.    So cutting -- it appears to be there are two cuttings

1 from Q12, in other words, right? Q12-1a and --

2 A. I think that's probably an inaccurate term. There were  
3 actually -- if you read the notes, there were two swabbings.

4 Q. All right. That's what I was really getting at is is  
5 cutting different than swabbing?

6 A. Yes.

7 Q. But we have two swabbings of the Maglite? They were  
8 identified as Q12-1a and 1b, correct? And judging by the  
9 narrative, they were done the same day, which was December  
10 the 27th, but one of them was saved for later examination or  
11 later processing; is that right?

12 A. That is correct.

13 Q. Okay. Then let's move over. What does the term  
14 Describe By mean?

15 A. The term Describe By is actually, in this instance, not  
16 the person who actually did that description.

17 Q. Okay. What -- well, let's first of all talk about what  
18 the term Describe By means.

19 A. The Describe By is normally what the description or who  
20 actually described that item.

21 Q. Okay. And if you look at the previous column entitled  
22 Description, once again, not -- I am not -- I am really  
23 asking the meaning of the terms on the form, but ordinarily  
24 speaking, the person whose initials appear in the Describe  
25 By would be the person who wrote that description, correct?

1 A. In some instances it is.

2 Q. Okay. I need to ask some further.

3 Why would there be somebody else's initials in the  
4 Describe By if that's not the person who actually described  
5 it?

6 A. Because this was done on two different dates, our  
7 system, which is a trackable system, overwrites the original  
8 Description By with the second person who came in to create  
9 that Q12-1b.

10 Q. So --

11 A. So the --

12 Q. Go ahead. Sorry. I didn't mean to interrupt.

13 A. That's okay. So the Collect By is the person who  
14 actually wrote each of those descriptions.

15 Q. So when it says jmj for Describe By on December the  
16 27th, it really wasn't jmj, correct? Is that what you are  
17 saying?

18 A. That is correct. The person who would have described  
19 that would have been the person lim.

20 Q. And where is there anything that says that?

21 A. I am sorry. I did not hear that question.

22 Q. Where is there a record or document in the paper trail  
23 of this item that actually says that the record is  
24 inaccurate as to who described an event?

25 A. The documentation is actually who has chain of custody

1 of that item of evidence. So if you refer to the chain of  
2 custody and specifically also the Sample Processing Record,  
3 those two records show that the individual with lim was the  
4 only person in possession of that item at that date.

5 Q. My question was something different.

6 My question was is it true -- well, my question  
7 actually was is there a document that says that the person  
8 who described -- who wrote the description in that term  
9 wasn't the person whose initials appear under Describe By?  
10 And is your answer, we have to look at some other  
11 documentation to see who had possession of the item?

12 A. That is correct. It does not necessarily stand alone.  
13 It is with all of the documentation is how you were able to  
14 read our notes.

15 Q. Okay. Then let's look back at S-1.

16 I am sorry. I have might have picked the wrong  
17 one. Give me a second to make sure I have got the right  
18 document.

19 Actually, before I do that -- I will come back to  
20 that, but I want to finish going over the terminology of the  
21 form.

22 The next thing says Collect By. So what does that  
23 mean?

24 A. That is the person who actually took -- would have done  
25 the description as well as the person who actually cut that

1 sample and put it into a tube.

2 Q. Okay. So that's the person who did the swabbing, in  
3 other words, right?

4 A. That is correct.

5 Q. And then the last column, Collect On, what does that  
6 mean?

7 A. That is the date that that sample was cut and put into  
8 a tube.

9 Q. Okay. Now, a while ago we had a little bit of  
10 confusion about the term swabbing versus the term cutting.  
11 So what's the difference? What does that mean?

12 A. Essentially the swabbing is for items that you cannot  
13 necessarily take a cutting from. However, you can -- once  
14 you actually swab an item, that swab is actually what you  
15 are cutting.

16 Q. Okay. Explain what cutting means. Maybe that's what I  
17 am not getting. You take you a swab.

18 A. So cutting --

19 Q. You get some form of sample on the swab. Then what do  
20 you do with it?

21 A. So imagine a Q-tip.

22 Q. Okay.

23 A. What we are going to do is moisten that Q-tip with some  
24 water, and we are going to rub it across areas where we  
25 would potentially expect there to be skin cells left behind.

1 From that, we will actually take that entire Q-tip head off,  
2 all the cotton all the way around it so that only the stick  
3 remains. And that cotton is placed into a tube.

4 Q. Okay. Now -- okay. I get it.

5 Is there such a -- what's -- is there such a thing  
6 as a dry swabbing that's not done involving wetting?

7 A. That is not our lab practice.

8 Q. Okay.

9 A. But there is such a thing as a dry swabbing.

10 Q. A swabbing done in your lab would have been a wet  
11 swabbing?

12 A. Yes, that is correct.

13 Q. Okay. Now, a minute ago you said that we needed to  
14 look at other documents to determine how we should know that  
15 the person in the Describe By column really wasn't the  
16 person who did the description. So I am trying to figure  
17 out what other documents we would look at. You have been  
18 through the exhibits. Have you seen the other document that  
19 we'd look at in there anywhere?

20 A. Yes. So --

21 Q. I am not --

22 A. So one of the documents is going to be Document S-1,  
23 Defense Exhibit S-1.

24 Q. Okay.

25 A. The other document is going to be Government's

1 Exhibit -- it's Exhibit 11, Attachment A.

2 Q. Okay. Let me find that one. Okay. Yeah, I think  
3 that's one of ours too, but we can use that one.

4 Okay.

5 A. Okay.

6 Q. So show us how either of these documents shows that lim  
7 and not jmj was the person who wrote the description?

8 A. Okay. So Item 212 was on 12/27/2010. This is  
9 Attachment A that I am looking at from Government's Exhibit  
10 11.

11 Q. Okay.

12 A. Shows that it moved from evidence storage to Erin  
13 Farais as part of the Nuclear DNA Unit.

14 Q. Okay.

15 A. And then on the same day from Erin Farais to -- this is  
16 Lilliana Moreno.

17 Q. Okay. Tell us where you are looking. I am sorry.  
18 Tell us what -- I am not following.

19 A. Okay. Page 1.

20 Q. Of?

21 A. So this is government exhibit, Page 4 of 27.

22 Q. Got it.

23 A. I am looking at the sixth box down.

24 Q. Okay.

25 A. Starting there where it says EVIDENCE STORAGE as a

1 stamp.

2 Q. Right.

3 A. So EVIDENCE STORAGE to Erin Farais, who is part of our  
4 Case Administration Group, and then from Erin Farais to  
5 Lilliana Moreno, which is the seventh box down.

6 Q. All right.

7 A. And then back from Lilliana Moreno to Erin Farais on  
8 that same day.

9 Q. Okay. Got it. How does that mean that jmj didn't  
10 describe something?

11 A. At the same time, if you look at Defense Exhibit S-1,  
12 Lilliana Moreno made the first entry of the Q12-1b  
13 swabbing --

14 Q. Right.

15 A. -- and transferred that to Erin Farais on 12/27/2010.

16 Erin Farais, back to Exhibit 11, Government's  
17 Exhibit 11, Attachment A, Page 5 of 27, first box, she then  
18 takes the DNA secondary evidence --

19 Q. I am sorry.

20 A. -- and puts it into evidence storage.

21 Q. I am sorry. I missed where you were saying. Say that  
22 again.

23 A. Okay. The Defense Exhibit S-1.

24 Q. Right.

25 A. The first box.



1 Q. I see that.

2 A. Lilliana Moreno takes a swabbing and gives it to Erin  
3 Farais on 12/27/2010.

4 If you switch back over to Government's Exhibit  
5 11, Attachment A, Page 5 of 27, Page 2 of 3 of the Chain of  
6 Custody, Box 1, that shows that the nDNA used secondary  
7 evidence was delivered by Erin to evidence storage with the  
8 Remarks of see the SPR for that specific lab number.

9 Q. Okay. And the SPR would be S-1 Sample Processing  
10 Record?

11 A. That is correct.

12 Q. Okay.

13 A. That shows that Lilliana Moreno was the only person  
14 other than the Case Administration Group that had custody of  
15 that item of evidence on that day.

16 Q. Meaning that the entry on the Collection Notes T-1 is  
17 wrong, correct?

18 A. The entry on the Collection Notes -- I am sorry. That  
19 was T-1. Sorry.

20 The Description is accurate. The Collect By is  
21 accurate. The Collect On is accurate. The Describe By,  
22 that is not accurate. That is not the person who described  
23 that. But it was overwritten by the system of when Q12-1b  
24 was created. It then put that person's initials in that  
25 field.

1 Q. Okay. Thank you.

2 Let's look at the second page of T-1. And let's  
3 go down those headings. What does -- what does Batch Info  
4 and a processed date mean for that?

5 Do you see where I am looking at?

6 A. I do. Like halfway down the page.

7 Q. Yeah.

8 A. That is the information regarding all the reagents that  
9 were used for that specific batch and what date that batch  
10 was actually processed on --

11 Q. Okay.

12 A. -- and who processed it.

13 Q. And this document, the second page of T-1, also  
14 contains the information about merger, correct?

15 A. That document contains partial information about the  
16 merger.

17 Q. Right. About the reagent blank, merger of the reagent  
18 blanks, correct?

19 A. That is correct. But that is not the date at which  
20 that merger occurred.

21 Q. That was going to be my next point, which is the  
22 reagent mergers did not occur on the 27th of December, did  
23 they?

24 A. No, they did not. They occurred on January the 7th,  
25 2010 --

1 Q. In fact --

2 A. -- which is shown in Government's Exhibit 13, which is  
3 the Dilution and Merge Notes.

4 Q. Right. But the Extraction Notes, the Collection and  
5 Extraction Notes, which is T-1, don't show the merger  
6 occurring on that day, do they?

7 A. No. The merger could not have occurred on that date  
8 because Q12-1b had not even been processed or collected on  
9 that date.

10 Q. Well, and in further point of fact -- well, Q12 -- but  
11 this isn't showing the mergers of Q12. This is showing the  
12 mergers of the reagent blanks. Okay? Q-b1 [sic] --

13 A. This is showing the merger of Q12.

14 Q. Oh, you are right. Sorry. It also shows -- under  
15 that, it shows the merger of the reagent blanks too,  
16 correct?

17 A. Yes, that's correct.

18 Q. And at least three of those blanks had not been created  
19 as of the 27th of December, correct?

20 A. No, they were not.

21 Q. Now, since you mentioned that the -- that all of the  
22 extractions done in your lab are wet extractions, I need to  
23 return -- or I need to move to what I think is probably one  
24 last topic, and if we could look at T-3.

25 T-3 is returning to the bottle cap, correct?

1 A. Yes.

2 Q. And it appears that there are two different -- not only  
3 two different swabbings of the bottle cap but on two  
4 different dates, correct?

5 A. Yes, that is correct.

6 Q. Okay. Now, let's talk about the formation of -- or the  
7 process by which swabbing occurs and by which reagent blanks  
8 are created. Walk us through that. You swab -- you do the  
9 wet swabbing.

10 Then how do you create the reagent blank?

11 A. The reagent blanks are created at the time at which the  
12 extraction is being performed.

13 Q. Okay. What does that mean?

14 A. Meaning that the way that we process our samples is  
15 that we process our samples first; our reagent blanks  
16 second. And this is partly to assure that we don't have  
17 contamination.

18 So for instance, I would have had the biologist,  
19 they would have cut that Q3-1a swab in this case because  
20 there were two swabs, they would have put those both in the  
21 tube, and then the following date at which the extraction  
22 occurred is when the tube for the blanks would have been  
23 created because blanks do not get created until chemicals  
24 are added.

25 Q. Okay. Understood.

1 A. So the chemicals get added to the sample first, and  
2 then they get added to each of the reagent blanks.

3 Q. If I can have one moment. If we could look at S-1  
4 again, please.

5 Do you know who Melissa Ramirez is or a name to  
6 that effect?

7 A. I do.

8 Q. Who is she?

9 A. She is a biologist in the Nuclear DNA Unit.

10 Q. It appears that she took the samples that were taken on  
11 December the 27th out of evidence storage on the 28th.

12 Is there any record anywhere that says what she  
13 did with them or why she took them?

14 A. Yes, there is.

15 Q. Okay. Show --

16 A. If you look at -- It's part of Defense Exhibit T-3.

17 Q. Okay.

18 A. The page that says -- starts Quantifier Notes.

19 Q. Got it.

20 A. For 12 -- 120209015.

21 Q. Okay. Slow down. I am sorry. I don't see that.

22 A. Oh, I am sorry. Hold on a second. What is this? We  
23 are on Q12. Sorry. I think I pointed you to the wrong  
24 page.

25 Q. Okay.

1 A. Okay. So it's going to be the Laboratory No.  
2 101130010.

3 Q. Okay. I am sorry.

4 A. Quantifier Notes.

5 Q. I need to back up a little bit. We are on the  
6 Quantifier Notes that appear in T-1. Okay?

7 A. T-1.

8 Q. Okay. I got the lab number.

9 A. Yes. Okay. The -- the batch that says Process -- so  
10 it's going to be page 2 of the Quantifier Notes --

11 Q. Okay.

12 A. -- is where it says Process On --

13 Q. Okay. I see the initials now.

14 A. -- 12/28 and mar.

15 Q. All right. Got it.

16 Okay. If I could have one moment to talk with my  
17 expert.

18 Thank you, Ms. Carr. Those are my questions.

19 THE COURT: Mr. Fitzgerald.

20 MR. FITZGERALD: Nothing further, Your Honor.

21 Thank you.

22 THE COURT: May this witness be excused?

23 MR. FITZGERALD: Yes.

24 MR. LESSLEY: Yes.

25 THE COURT: All right. Thank you very much for

1 your time this morning. We are going to hang up now.

2 THE CLERK: Thank you.

3 THE WITNESS: Okay. Thank you.

4 THE COURT: So you are done with your witnesses,  
5 as I recall, and you have one, but it's a holdover for  
6 tomorrow?

7 MR. FITZGERALD: There is one holdover for  
8 tomorrow, and Mr. Lessley has indicated that he doesn't need  
9 his testimony, but I think I have got a reason to call him  
10 at this point, so I am going to ask that the court allow us  
11 to call one more witnesses.

12 MR. LESSLEY: Your Honor, we just have one witness  
13 who we can call at the court's convenience. She is here  
14 today. I'd propose to do it this afternoon.

15 THE COURT: All right. We'll reconvene at 1:30.  
16 Will that work for everybody? Do you have the docket today?

17 MR. LESSLEY: Your Honor, you and I have a hearing  
18 with Mr. Nelson at 1:30.

19 THE COURT: And I also need to check with  
20 Ms. Anderson about what -- because you have Coffin's  
21 calendar today.

22 THE COURT REPORTER: They will just tape it.

23 THE COURT: They'll tape it. Okay.

24 So I don't know how long our 1:30 will take.

25 MR. LESSLEY: I am afraid I don't know either.

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1 THE COURT: Why doesn't everybody come back ready  
2 to go at 1:30. I don't think ours is going to take very  
3 long, so we'll just move right into it.

4 Okay. Thank you. We are in recess until 1:30.

5 (Recess.)

6 THE COURT: Ready to go?

7 MR. LESSLEY: We need Mr. Crawford brought in, but  
8 other than that, yes.

9 THE COURT: The key to the holding cell isn't  
10 working. Now that's a problem. Happy New Year.

11 Happy to see we have a good working key now.

12 Call your next.

13 MR. LESSLEY: Janine Arvizu.

14 THE CLERK: Please come forward and be sworn.  
15 Watch your step taking the witness stand. Once up there,  
16 please raise your right hand.

17 (The witness was sworn.)

18 THE CLERK: Please state your full name and spell  
19 your last name for the record.

20 THE WITNESS: Janine Arvizu, A-R-V-I-Z-U.

21 **DIRECT EXAMINATION**

22 BY MR. LESSLEY:

23 Q. Good afternoon, Ms. Arvizu. First of all, I'd ask you  
24 to look, if you would, at Defense Exhibit V and tell us what  
25 that is, please.



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1 A. That's a copy of my resume.

2 Q. And it describes you as a certified quality auditor.

3 Could you tell us what that means, please.

4 A. Sure. I am a chemist who works in the area of quality  
5 assurance of analytical measurements. And in support of  
6 that, I have been certified as a quality auditor by the  
7 organization of quality practitioners, which is the American  
8 Society for Quality.

9 Q. Okay. And let's just -- in terms of -- the term  
10 "quality" means what in the context of your work?

11 A. Quality systems are used by analytical laboratories to  
12 put in place systematic practices to provide for the  
13 consistent generation of good quality results.

14 Getting a reliable measurement result in a testing  
15 laboratory depends on more than using expensive instruments  
16 operated by competent people. There are many, many factors  
17 that go into the generation of acceptable quality, reliable  
18 results on a consistent basis.

19 So that's what quality assurance does. It puts in  
20 place systematic practices throughout the laboratory to  
21 control all the variables that matter in the generation of a  
22 reliable test result.

23 Q. Essentially, auditing laboratory -- excuse me --  
24 laboratory processes and procedures, correct?

25 A. Yes, as an auditor, I conduct independent assessments

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1 of -- in some cases, of a specific laboratory result or in  
2 other cases, more generally the operations of a laboratory.

3 Q. You mentioned being certified by the American Society  
4 for Quality. What is involved in the certification process?

5 A. The American Society for Quality administers a number  
6 of certification programs. In order to be certified as a  
7 quality auditor, you need to have eight years of  
8 professional experience in the quality discipline, followed  
9 by at least three of those years need to have been in a  
10 decision-making capacity.

11 There is an examination that is administered at  
12 least annually on the entire body of knowledge relevant to  
13 audits, and it includes everything from sampling statistics  
14 through the conduct of audits. You have to pass that  
15 examination, and it's a four-hour exam and has an  
16 appreciable failure rate. I think at the time I took it  
17 about a quarter of the people who sat for the exam failed  
18 it.

19 And in order to maintain certification, you are  
20 required, every three years, to file documentation of  
21 continuing education credits and recertification credits  
22 from things like publishing articles, making presentations,  
23 providing training, that kind of thing.

24 Q. And you also have the science background in terms of  
25 your education?

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1 A. I do. I have a bachelor of science in biochemistry  
2 from Cal Poly in San Luis Obispo and ABD in Chemistry from  
3 the University of New Mexico. That's all but dissertation  
4 admitted to candidacy for a PhD degree in chemistry.

5 Q. And take us through your professional -- I don't want  
6 to go line by line on every professional experience you have  
7 had, but you have basically been a laboratory quality  
8 auditor for how long?

9 A. Decades.

10 Q. And some of that has been in self employment, correct?

11 A. Correct.

12 Q. Some of that has been in employment by public agencies;  
13 is that correct?

14 A. I started my career working for the Department of  
15 Energy; not as a direct federal employee. The national  
16 laboratories in this country are operated by M&O  
17 contractors, management and operating contracts. So I  
18 worked for the contractor that ran the national lab.

19 Q. And you have also, it looks like, as we look through  
20 your professional experience, had a rather large project or  
21 projects that you served for the United States Navy.

22 A. Yes. I managed -- I was program manager for their  
23 laboratory quality program that evaluated and approved  
24 testing laboratories to do work for the U.S. Navy. So  
25 whether it was a commercial lab or a government laboratory,

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1 if it was going to do analytical work for the U.S. Navy, it  
2 had to go through the evaluation process.

3 I actually authored the standard that was used as  
4 the basis for approving those laboratories and then led  
5 audit teams to do on-site inspections of the laboratories.

6 Once a laboratory was approved and doing  
7 analytical work for the navy, on an ongoing basis I  
8 evaluated the work produced by the laboratory to ensure that  
9 it met standards.

10 In the event that it didn't, I would let the Navy  
11 know so that they could essentially withdraw payment for  
12 those services and require that the work be redone in the  
13 event that the lab company did not meet standards.

14 Q. Thank you. And is it fair to say that over the course  
15 of your career, you have both inspected and reviewed  
16 laboratories to see whether their procedures were  
17 appropriate as well as you have helped laboratories  
18 establish appropriate procedures?

19 A. That is correct.

20 Q. And have you ever testified as an expert or been  
21 qualified as an expert in a court of law before?

22 A. I have.

23 Q. How many times?

24 A. The last time I counted, it was more than a 100. I  
25 haven't counted recently, though.

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1 Q. And that qualification was in what particular field or  
2 fields?

3 A. They don't always use those words precisely, but when  
4 they do, it's generally in laboratory quality assurance or  
5 the assessment of laboratory test results.

6 Q. Meaning procedures?

7 A. Procedures. The procedures through which reports are  
8 generated and results are reported. It is -- my testimony  
9 has ranged from sampling issues through laboratory testing,  
10 result reporting on a variety of kinds of testing,  
11 everything from DNA, toxicology, gunshot residue, controlled  
12 substance testing, pretty much the full gamut of forensic  
13 testing techniques.

14 MR. LESSLEY: Your Honor, I'd move her admission  
15 as an expert in the field of laboratory quality assurance  
16 and analysis.

17 MR. FITZGERALD: No objection.

18 THE COURT: Noted.

19 BY MR. LESSLEY:

20 Q. Mrs. Arvizu, have you reviewed a compendium of  
21 documents that I have provided you in this case?

22 A. I have.

23 Q. And those would include the exhibits that you have in  
24 front of you; is that correct?

25 A. Yes.

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1 Q. As well as have you reviewed the policies and  
2 procedures of various documents at the FBI Laboratory?

3 A. I received quite a number of policies and procedures  
4 with the discovery in this case, yes.

5 Q. And other various documents that I have provided you  
6 over the course of this litigation, correct?

7 A. Yes.

8 Q. If we could look at Exhibit W, please.

9 Can you identify what Exhibit W is?

10 A. Yes. This is a report that I wrote to your attention  
11 last fall that described the results of my initial review of  
12 the discovery in this case.

13 Q. And since then you have continued to interact with us  
14 and continued to review documents; is that correct?

15 A. That's correct.

16 Q. And you have also attended the hearing today, so that  
17 you heard both the testimony of Agent Soule and the  
18 testimony of Ms. Carr?

19 A. That's correct.

20 Q. Now, I'd like to start with a fairly general category,  
21 and that is we heard Ms. Carr talk about the FBI Laboratory  
22 being audited. And I don't -- she may have used more than  
23 just the term audit. But basically it sounded like reviewed  
24 by -- either internally or externally as to their  
25 procedures.

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1 Are you familiar with the kinds of audits and the  
2 kinds of reviews that go on at the FBI Laboratory or at  
3 other certified laboratories?

4 A. I am. And the term is accredited laboratories, not  
5 certified.

6 Q. All right. And tell us what kind of audits there are.

7 A. The audit that Ms. Carr was probably referring to, the  
8 primary audit, is an audit that's conducted by the  
9 laboratory. It's an accrediting agency. There are three  
10 agencies, independent agencies in the United States that  
11 accredit forensic labs. One of them is the American Society  
12 of the Crime Laboratory Directors Laboratory Accreditation  
13 board. The acronym is ASCLD/LAB. That is the third-party  
14 agency that actually accredited the FBI Laboratory.

15 That agency periodically, every few years, audits  
16 their accredited laboratories through what is known as a  
17 systems audit. That is an assessment of the systems in  
18 place at the laboratory to determine whether or not they  
19 comply with international standards, in particular ISO  
20 17025, which is the international consensus standard for  
21 testing laboratories.

22 That is contrasted with a more limited assessment  
23 that is conducted annually. There is a much more limited  
24 scope assessment of the laboratory that's conducted on an  
25 annual basis.

1           And in addition, the laboratory itself conducts  
2 internal audits on an annual basis as a condition of their  
3 accreditation.

4           Audits are acknowledged and recognized as one of  
5 the more effective means of monitoring and evaluating  
6 systems in a laboratory to see whether or not they are  
7 working. And laboratories are generally responsible for  
8 responding to the deficiencies that are identified and  
9 putting in place, after an investigation, corrective action  
10 to prevent those problems from recurring.

11 Q.   How deep are the audits? Either the external or  
12 internal ones? Do they go back and look at every piece of  
13 paper in every case and see if every procedure was followed,  
14 or what do they do?

15 A.   Absolutely not. By its very nature, these audits are  
16 necessarily a sampling exercise. There is no way that a  
17 handful of auditors could review the entire body of work  
18 created by the FBI Laboratory.

19           So it's a sampling exercise, and in particular,  
20 accreditation audits are not designed to do the kind of  
21 start-to-finish audit that was done in this case to try to  
22 look at a specific item of evidence.

23           They are a much broader inspection of the systems  
24 in place at the laboratory. Does the laboratory have  
25 procedures that describe their practices for all the kinds



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1 of activities that they need them. Is there any evidence  
2 that they are actually following procedures. Are there  
3 records that demonstrate that. So it's a much more broad,  
4 very, very, very thin review of the work performed by the  
5 laboratory.

6 That is not the same thing as a vertical audit, a  
7 cradle-to-grave audit of one item of evidence, which is the  
8 kind of an audit or an assessment that I did in this case.

9 Q. All right. Thank you.

10 Let's look at your report, which is Exhibit W, and  
11 let's start with Page 2.

12 And the part I want to focus on is under the  
13 heading Q3-1 screw cap, but I think that this particular  
14 paragraph or paragraphs is more general, and that's what I  
15 want to ask you.

16 The paragraph beginning with "An analytic" --  
17 "An analytical simple" -- I have misspoken twice  
18 now -- "An analytical sample is presumed to have  
19 integrity, and its analytical results are presumed  
20 to represent the originally seized evidence, when  
21 sample quality is maintained throughout its  
22 lifetime and each of the following conditions are  
23 met."

24 And then over the rest of that page and the  
25 beginning of the next page you spell out a certain number of

1 conditions.

2 Explain what you mean by "integrity" and what you  
3 mean by some of the terms you used in that description.

4 A. Sure. The integrity of an item of evidence is an  
5 essential data quality indicator for testing laboratories,  
6 whether it's a laboratory that's testing forensic evidence  
7 or whether it's a laboratory that's testing drinking water.

8 It's essential that we be able to unambiguously  
9 correlate a result with a specific sample and that that  
10 result be considered to represent the original sample.

11 If there's anything that happens during the sample  
12 collection or storage or transportation of that sample to  
13 compromise its identity or its chemical or physical form,  
14 then we can't simply assume that the final result represents  
15 the original item of evidence or the original sample.

16 So it's a consistent challenge of testing  
17 laboratories because at best, a testing laboratory's result  
18 represents the sample at the time it was received by the  
19 laboratory.

20 If there was anything that compromised the  
21 integrity of that sample before it was received by the  
22 laboratory, there's generally little if anything that the  
23 laboratory can do to remediate that situation. So at best,  
24 the lab's result represents what was in the sample at the  
25 time it was received.

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1           In order to ensure that, though, the laboratory  
2       has to have procedures in place to control the evidence and  
3       maintain its physical and chemical form, prevent  
4       contamination, and to maintain its identity in an  
5       unambiguous fashion. That's done through contemporaneous  
6       records and through following procedures.

7       Q.     That was the point I was going to get to.

8           As I look at the list of things that are important  
9       to maintain what you call integrity, I see the words  
10      "contemporaneous records" appearing frequently.

11           What's the importance of -- it may be an obvious  
12      question, but what's the importance of contemporaneous  
13      records and what should contemporaneous records show?

14      A.     Testing laboratories doing this kind of work are  
15      essentially trying to practice science on a production line,  
16      and because of that challenge, it's imperative that records  
17      be made of testing practices at the time that they are  
18      generated; that you don't rely on anybody's memory as to  
19      what happened two years ago on Tuesday but that you make  
20      your entries contemporaneously at the time the observation  
21      is made or at the time the activity is performed.

22           As an auditor, my confidence in a record increases  
23      if it's contemporaneous, and my confidence in the  
24      reliability of a record decreases as the distance in time  
25      and space increases.

1           So if a record is generated based on somebody's  
2   best memory of something that happened after the fact,  
3   that's not as reliable in reconstructing the events as a  
4   record that's made at the time of the event.

5   Q.   Now, you mentioned the importance of contemporaneous  
6   records in terms of the testing and the examination process,  
7   but that would also be true of all of the handling of the  
8   item by the laboratory?

9   A.   It absolutely is not just by the laboratory; also prior  
10   to its receipt by the laboratory because if we need to draw  
11   a conclusion based on the evidence that was seized, then its  
12   integrity must be protected throughout its entire life  
13   cycle, if you will, from the point at which it is identified  
14   in the field through its ultimate testing and reporting.

15   Q.   Let's move on to some specifics. You have the defense  
16   exhibits in front of you, correct?

17   A.   I do.

18   Q.   I'd actually like to start with Q12, the Maglite. And  
19   I'd like to start with exhibits in the T series.

20           Now, even though I said that I am going to start  
21   with the Maglite, I am going to do something a little funny  
22   by starting with a point I want to look at on the bottle  
23   cap. And so let's start with looking at T-3.

24           On the first page of T-3, we see in the far right  
25   column the words "Collect On," right?

1 A. Yes.

2 Q. And there appear to be two swabbings made of Q3 with  
3 Collect On dates of February 14th, 2012, and March 12th of  
4 2012.

5 Do you see those dates?

6 A. I do.

7 Q. Now, if we look through the next two pages of Q3 -- and  
8 we can show them sequentially. Let's start with this one.

9 This is the second page of Q3. We see -- these  
10 are Extraction Notes showing that the extraction happened --  
11 one of the two extractions happened on March the 13th, which  
12 was the day after the second collection, right?

13 A. Correct.

14 Q. And then if we look at the next page, we see that the  
15 extraction occurred the date after the initial collection,  
16 correct?

17 A. Correct.

18 Q. And so if we go back to the first page of T-3, we see  
19 that the term Collect By or Collect On, excuse me, appears  
20 to refer to the date on which the swabbing was made; that  
21 is, on the date that the sample was collected.

22 Is that what it appears to indicate to you?

23 A. It does.

24 Q. All right. Now let's look back at T-1.

25 T-1 is the Collection Notes pertaining to the

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1 Maglite. And if we looked at the last column, we see  
2 Collect On and we see two collection dates.

3 Do those dates correspond with the date on which  
4 the swabbing was made?

5 A. There is significant ambiguity associated with the  
6 dates in these records.

7 Q. Let me back up and ask it differently, then.

8 A. Okay.

9 Q. You were present when Ms. Carr testified?

10 A. I was.

11 Q. All right. And did Ms. Carr make the assertion that  
12 the January 7th collection date for Q12-1b was a reference  
13 to the date on which the extraction was made, not the date  
14 on which the swabbing was made?

15 A. She did.

16 Q. And if that's the case, if that's what the collection  
17 date on this form means, that would be inconsistent with the  
18 exact same term appearing on the form for the bottle cap; is  
19 that correct?

20 A. That is correct, or for the Maglite.

21 Q. Well, this is the Maglite.

22 A. Yeah. This is the Maglite. That was the bottle cap.

23 You can't interpret the same field the same way on  
24 both of those and get a consistent answer.

25 Q. And what appears to be the same or a very similar form

1 in which they are making entries that appear to mean two  
2 different things?

3 A. Correct.

4 Q. Now, we also heard Ms. Carr, we are looking at T-1, the  
5 first page, say that even though jmj supposedly described  
6 the Q12-1a sample, that that's not really true?

7 A. Yes.

8 Q. And did you understand the mechanism by which she said  
9 that incorrect entry was made?

10 A. I believe that I understood her explanation. However,  
11 I still find a number of inconsistencies. And it still is  
12 in direct conflict with the laboratory's procedure that was  
13 in effect at the time. And it's certainly incompatible with  
14 good recordkeeping practices as required by the  
15 international standard that serves as the basis for this  
16 laboratory's accreditation.

17 A technical record -- it is perfectly acceptable  
18 to have a record generated by a laboratory information  
19 management system, a LIMS system, as this laboratory is  
20 using. They have a system that the analysts go online onto  
21 the computer. They make their entries and enter their text,  
22 and it records it and produces this type of a record.

23 But there are only two ways for that to be an  
24 acceptable record. One is that you print the record and you  
25 sign it. And by your signature, you are attesting to the

1 fact that everything on that record is accurate and was  
2 contemporaneously recorded.

3 The other way is to have a purely stand-alone  
4 electronic system where the only way to make an entry is by  
5 a secured transaction; that is, I am the only one who can  
6 log in as me and I am the only one who can enter things that  
7 are attributed to me.

8 This laboratory's records in this case fail under  
9 either of those criteria because an independent reviewer who  
10 attempts to reconstruct what was done to which sample when  
11 simply cannot do it from these records because, by her own  
12 testimony, the entries on these fields mean different things  
13 on different pages and do not in fact reflect reality. Just  
14 because it says that somebody did something doesn't mean  
15 that they actually did it, which, from an auditor's  
16 perspective, renders these results unreliable for purposes  
17 of reconstructing the testimony in this case.

18 Q. All right. And I want to point out if we look at the  
19 bottom right corner of T-1, it does appear that it actually  
20 was initialed by someone in the laboratory.

21 A. That is correct. My understanding is that those are  
22 the initials from Jade Eberts in this case.

23 Q. Even though the form, as we know and by Ms. Carr's own  
24 testimony, contains inaccurate information?

25 A. Yes. And that's part of the reason this review was so



1 complicated because if you try to reconstruct the sequence  
2 of events based on the written record, it's an impossibility  
3 because things are happening to samples before those samples  
4 exist.

5 Q. Let's go there now. Okay. I want to stay on the first  
6 page of T-1 for a couple of minutes, though.

7 A. Okay.

8 Q. Because underneath the section relating with Specimen  
9 Q-1 -- Q12-1, there's a heading about QB reagent blanks,  
10 right?

11 A. Yes.

12 Q. All right. And tell us what a reagent blank is.

13 A. A reagent blank is a type of a quality control sample  
14 that is introduced to an analytical batch to monitor the  
15 performance of the testing in a real practical, empirical  
16 sense.

17 By including a sample that is known to be clean,  
18 that is known to be blank, you can monitor whether or not  
19 you are introducing any contamination during the course of  
20 your testing process.

21 What's really important about these kinds of  
22 quality control samples is that they need to be done at the  
23 same time as your unknown samples or your subject samples  
24 or, in the terminology used by the FBI Lab, the question  
25 samples, the ones that start with a Q.

1           And they need to be done in exactly the same  
2     manner, using all the same reagents, all the same consumable  
3     materials. In that way, you can monitor the testing  
4     process. You can't prepare them at a different time or  
5     using different materials and expect them to effectively  
6     monitor how you are treating your subject samples.

7     Q.    So let's put this in more specifics, looking at the  
8     form.

9           If we assume that all of the swabbing that was  
10    done on the Maglite was done on December the 27th, all  
11    right, and we heard the term wet swab, right?

12    A.    Yes.

13    Q.    That means wetting the device that is going to be used  
14    for a swab?

15    A.    Yes.

16    Q.    And was it your point a minute ago that the reagent  
17    blanks need -- that whatever material is used to wet that  
18    swab also needs to be used for the reagent blanks?

19    A.    That is correct.

20    Q.    And so it ought to be -- if it's -- if it's a bottle of  
21    water, then they ought to use the exact same bottle of water  
22    for the entire preparation process?

23    A.    Exactly.

24    Q.    Okay.

25    A.    This isn't just going to the tap and turning it on.

1 Under their own procedure, they are required to use  
2 autoclaved, pure filtered water. And it has a shelf life.  
3 It's only good for a year. It has an expiration date. It  
4 has to be stored under certain conditions. And so it needs  
5 to be uniquely identified. And it needs to be used for all  
6 the samples in the batch.

7 Q. And if we look at the first page of T-1, we see, if it  
8 is true, that all of the swabbing of the Maglite was done on  
9 January -- or excuse me -- December the 27th, that at least  
10 three of the reagent blanks weren't created until January  
11 the 7th?

12 A. Correct.

13 Q. Which means they could not have been done at the same  
14 time using the same material?

15 A. Correct.

16 Q. Now, if we could look at Page 2 of T-1, we see a  
17 document called Extraction Notes.

18 And it lists Q12 flashlight; it lists QB, which  
19 are the reagent blanks; and it lists Batch Info. What's the  
20 significance of the term batch info?

21 A. Batches are foundational to processing unknown samples  
22 in a testing lab and in a forensic laboratory because a  
23 batch defines that set of samples that are all processed  
24 together using the same equipment, using the same reagents  
25 by the same analyst at the same time so that the known

1 samples and the question samples are all experiencing the  
2 same set of conditions.

3 Without having all those batches be prepared and  
4 run at the same time in the same manner, then you can't use  
5 your quality control results to infer anything about how  
6 well your method worked on your unknown samples.

7 Q. And I want to point out, if we look under the heading  
8 Reagent Blank on the second page of T-1, we see that QB-1an  
9 was merged with QB-4an?

10 A. Yes.

11 Q. We see that 2 was merged with 5; 3 was merged with 6,  
12 correct?

13 A. Yes.

14 Q. Meaning that all of the reagent blanks that were made  
15 on December the 27th were merged with reagent blanks that  
16 were made on January the 7th?

17 A. According to this document, yes.

18 Q. Meaning that in terms of extraction or in terms of  
19 analysis, there were no reagent blanks tested by the  
20 laboratory that were wholly manufactured at the same day as  
21 the swabs were taken, correct?

22 A. Correct.

23 Q. Now, what date does it say this merger occurred?

24 A. 12/27/2010. Right in the middle under Batch Info, it  
25 identifies the batch ID number. That's essentially the lot

1 number that describes the contents of the batch. And the  
2 date it was processed is listed as 12/27/2010.

3 Q. But if the blanks bearing the numbers 4, 5, and 6  
4 weren't created until January the 7th, how could these  
5 mergers have occurred on December the 27th, basically ten  
6 days earlier?

7 A. They could not.

8 Q. Now let's look at Government's Exhibit 13; not our  
9 Exhibit 13, but the government's.

10 *(Counsel conferred with the computer tech.)*

11 BY MR. LESSLEY:

12 Q. So we have on the computer screens a side-by-side  
13 comparison of the second page of our T-1 with Government's  
14 Exhibit 13.

15 Government's Exhibit 13 appears -- well, bears the  
16 title Dilution and Merge Notes. Okay?

17 A. Yes.

18 Q. What date does that say the mergers occurred?

19 A. 12/27/2010.

20 Q. I'm sorry. Government's Exhibit 13?

21 A. Oh, I am sorry. January 7th, 2011.

22 Q. And yet the other document labeled Extraction Notes  
23 says that the mergers occurred on December the 27th, 2010?

24 A. Yes. That their batch was processed for extraction on  
25 December 27th, and this Extraction Notes page should

1 document the samples that were processed on that day in that  
2 batch through the extraction, and it identifies -- whoops.  
3 I touched it, sorry. It identifies these merged samples  
4 that didn't even exist for more than a week.

5 Q. And I made this point earlier, but regardless of which  
6 day the mergers occurred, it still involved mergers of  
7 blanks that were manufactured on -- I said ten days -- I  
8 think 11 days apart, correct?

9 A. I didn't count the days, but it's days apart, yes.

10 Q. And so it would not be done according to a protocol  
11 that says the blanks are supposed to be done at the same  
12 time as the swabbing, or it would not be done according to a  
13 protocol that says the blanks are supposed to all be made  
14 using the same water and the same substances as the question  
15 sample?

16 A. In one of the instances for one of the items of  
17 evidence, they did them on the -- the batches of blanks were  
18 done on the same day, the 12/27. That's the only one.

19 The Q3 sample is when the blanks were actually  
20 done on a completely different day, all the blanks.

21 Q. I am sorry. I didn't -- I didn't get that.

22 A. That's T-3.

23 Q. No. I am sorry. Now I understood.

24 A. Okay.

25 Q. But I am saying that if for Q12, as we are looking at

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1 the Exhibit T-1, if the blanks containing the numbers 1, 2,  
2 and 3 were collected on the 27th of December and the blanks  
3 4, 5, and 6 were collected on January the 7th, and if 1 was  
4 merged with 4, 2 was merged with 5, 3 was merged with 6,  
5 that means, as we discussed earlier, all of the blanks would  
6 contain water or other -- whatever the substance was on two  
7 different days?

8 A. Yes.

9 Q. And so if all the swabbing occurred on the 27th, that  
10 means all the blanks would contain something that wasn't  
11 present at the time of the swabbing, correct?

12 A. Yes.

13 Q. And that would be true regardless of what day the  
14 merger occurred?

15 A. Yes.

16 Q. Now, I also want to turn now to Exhibit S-1. And what  
17 I note, if we have that in front of us, about S-1 is that  
18 this is a DNA Sample Processing Record, an SPR, as we heard,  
19 that involves various things associated with the Maglite,  
20 correct?

21 A. Correct.

22 Q. If we look down at the second to last entry on that  
23 page, we see some scratching out and some handwriting in the  
24 margins and some other handwriting and scratching out  
25 over -- under the term "Date," correct?

1 A. Yes.

2 Q. In fact, on the date 1/7/11, it appears that the 1/7/11  
3 was scratched out. Someone then initialed in 1/7/11, and  
4 that would appear to be J something J, and then somebody  
5 else, or perhaps the same person, initialed 1/11/11.

6 So can we tell what date that movement of the  
7 items actually occurred?

8 A. No, you really can't. You can't, with confidence, tell  
9 either what items were referenced to or the date on which --

10 Q. We are talking about the date first.

11 A. Okay.

12 Q. You have no confidence that the date can be accurately  
13 ascertained from this record, correct?

14 A. That is correct. What this entry means, when you line  
15 out -- and I should mention, you said scratched out. They  
16 didn't really scratch it out. You are never supposed to do  
17 that. You are supposed to do a single-line entry, which  
18 they did.

19 Q. All right.

20 A. When you make a single-line entry, you need to indicate  
21 by your signature or initials who is making the change, so  
22 if you could discern those initials, you'd know who made  
23 that change and then the date on which the change was made.

24 So the same date that this person made this entry,  
25 they edited it with a future date.



1 Q. Now, I want to point out something else. And we are  
2 going to get to the left-hand column in a minute.

3 But this appears -- and we are looking, again, at  
4 the second to bottom entry on the first page of S-1.

5 This appears to be the person whose name is  
6 Jacqueline something returning the material to evidence  
7 storage, right?

8 A. Yes.

9 Q. Yet if we look in the right-hand column, it has the box  
10 checked To Quantification.

11 A. Yes.

12 Q. Is evidence storage the same as quantification?

13 A. It is not.

14 Q. And so can you tell reliably from this entry where  
15 these items went?

16 A. No. They were sent to evidence storage. It's not  
17 clear whether the X for Quantification was entered as part  
18 of the edit or at the time of the original placement in  
19 storage.

20 Q. Now let's go over to the left-hand column, and we see  
21 that someone has drawn a line through some of the items that  
22 were transferred and has this arrow pointing from some other  
23 numbers with a date of 2/14/11, which is roughly a month or  
24 so after the events that are portrayed.

25 A. Yes.

1 Q. So what does that mean or what effect does that have on  
2 your thinking?

3 A. The individual who makes this entry, which it looks  
4 like this Jacqueline person, can't read the last name, is  
5 essentially, by her marks here, by her edits on the page,  
6 indicating that the items that she released from her custody  
7 into evidence storage were in fact not the questioned items  
8 but were the known items; that is, this is not -- these were  
9 not packages of bottle caps or Maglites. These were  
10 actually the extract tubes. These were the small, little  
11 tubes prepared during the processing of the evidence. So  
12 they just look like little tubes with liquid in them. They  
13 are not readily -- you can't look at them and tell what they  
14 are. You can only identify them by their ID numbers.

15 So she is, after the fact, weeks after the fact,  
16 saying that in fact these were different than what is  
17 entered here. Whether I remember that they were different  
18 or what, she didn't explain it. She just said that six  
19 weeks later I went back and made a change and changed the  
20 identity of the items that were transferred into evidence  
21 storage.

22 Q. Now let's look at the next page of the same exhibit,  
23 S-1. And we see handwritten indications at the bottom of  
24 that.

25 First we see one swabbing, 8 tubes total scratched

1 out and the number 16 written there. And then we see two  
2 initials having been put there on two different dates.

3 So in terms of your opinion about recordkeeping,  
4 and integrity was the term we used, and contemporaneous  
5 records, what does that tell you about this particular  
6 laboratory document?

7 A. It simply does not communicate what changes were made,  
8 when they were made, or why they were made or on what basis  
9 those changes were made.

10 These are hand-filled-out records. We expect  
11 human beings to make mistakes. That's not the issue here.

12 The issue is that it's the responsibility of the  
13 laboratory to have in place a system for ensuring that the  
14 basis for those changes is known and documented so that we  
15 have an audit trail that still has integrity. That's not  
16 the case here.

17 Significant changes are made weeks after the fact  
18 with no basis for the change.

19 Q. And if we look up further on that same page, we see  
20 another change being made in the left-hand column with the  
21 initials and the date 2/15/11.

22 What's your thoughts about that?

23 A. Very similar circumstance in that, in this case, about  
24 three weeks later the identity of these small vials is being  
25 changed in the custody record. Custody transfers between

1 people essentially require a dual failure in order to let a  
2 mistake slip through because the person releasing the items  
3 should be checking what's being released versus what they  
4 have documented and the person who is receiving the item  
5 should be checking it.

6           They both would have had to fail at the same time  
7 in order for this type of an error to get through because  
8 this is not simply a transcription error. These are  
9 significant changes of the actual sample identity; not just  
10 mixing up two digits, for example.

11 Q. So let's finish up on Q12. Can we tell with any  
12 certainty, based on the documentation in the contemporaneous  
13 records, who described the swabbing process for Q12?

14 A. No.

15 Q. Can we tell with any degree of certainty, based on the  
16 contemporaneous records, what day the merger occurred?

17 A. No.

18 Q. And then we have just reviewed the handwritten  
19 chain-of-custody records, and we see ambiguities in that,  
20 correct?

21 A. Correct.

22 Q. So a while ago we heard Ms. Carr testify, and I wrote  
23 this down, that in terms of her examination of the chain of  
24 custody of Q12, she was unable to find, and this is a quote,  
25 any irregularities, end quote, in the chain-of-custody

1 trail.

2 Do you agree?

3 A. No.

4 Q. Let's move on to Q3. Q3 is the bottle cap.

5 Now, you have reviewed the documents from the  
6 Corvallis Police Department, and you heard Agent Soule's  
7 testimony today.

8 Our discussion of your credentials is mainly  
9 focused on laboratory assessment. But is there also an  
10 element to your work that involves field assessment?

11 A. Yes. I have taught field quality control to field  
12 sampling personnel. I have chaired field quality control  
13 sessions at national conference. And it's part of getting a  
14 broader perspective; not just narrowing your vision to just  
15 the laboratory but realizing that the quality and the  
16 usability of a laboratory result depends, in large measure,  
17 on what happens to that sample before it gets to the  
18 laboratory; that is, the field practices.

19 Q. And has some of your work involved reviewing the field  
20 practices by laboratories or helping laboratories develop  
21 field practice procedures?

22 A. Yes.

23 Q. Which or both?

24 A. Both.

25 Q. Now, we have a number of field issues about Q3. And

1 perhaps the way to do it would be look at your opinion  
2 letter. That's Exhibit W. Okay?

3 The collection of Q3 from the scene of the crime.

4 A. Okay.

5 Q. Photograph. Was there an adequate photograph taken of  
6 the bottle cap?

7 A. No.

8 Q. Documentation of the collection process. Does the  
9 documentation using contemporaneous records unambiguously  
10 document the collection of that item?

11 A. Neither the collection nor the packaging and storage  
12 conditions.

13 Q. The term that sometimes we used to use, I haven't  
14 really heard it in a while, garbage in, garbage out.

15 A. Yes. It's still valid.

16 Q. All right. Let's look at Q3 at the laboratory.

17 And if we could start -- give me a minute to  
18 fumble through papers -- at Exhibit K.

19 We talked about this one with Ms. Carr. I think  
20 we can probably go through it pretty quickly in terms of  
21 your testimony because we have already been over it. But  
22 the first reference we see to Q3 in the FBI Chain-of-Custody  
23 Log is the bottom entry on the first page of Exhibit K; is  
24 that correct?

25 A. That's correct.

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1 Q. Showing that Q3 and other items were transferred within  
2 the Explosives Unit from a person whose initials begin with  
3 J to a person's whose initials apparently begin with M, as  
4 near as we can tell, correct?

5 A. Correct.

6 Q. And the next entry we see about the movement of Q3  
7 occurs two pages later on the third page, the top entry,  
8 when a person named Robert Rooney transfers Q3 and, frankly,  
9 all the other same items that were originally listed on  
10 December 7th. On February the 23rd, roughly three and a  
11 half months later, two and a half months -- excuse me -- two  
12 and a half months later, Robert Rooney transfers these  
13 things back to the person whose initials begin with J; is  
14 that correct?

15 A. Yes.

16 Q. Is there any issue about that that comes to your  
17 attention in your capacity as an expert?

18 A. Yes. There's no indication in the custody record how  
19 Q3 got into Mr. Rooney's custody on February 23rd or how it  
20 ever left the custody of the person whose name starts with  
21 an M who received that item on December 7th. So during that  
22 period in time, these items of evidence and their custody  
23 was not documented.

24 Q. Oh, but come on. They are both in the Explosives Unit.  
25 He just gave it to me since I was going to the lab anyway or

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1 going to the unit. Can't they do that?

2 A. No. The standards for the laboratory's accreditation  
3 and as interpreted by the accrediting body are pretty clear  
4 in that each and every transfer of custody must be  
5 explicitly documented, and it must be completely unambiguous  
6 who had responsibility and maintained controlled custody of  
7 that item throughout its lifetime.

8 Q. Okay. Then let's look at the next -- two entries down,  
9 we are still on the third page of K, we see Exhibits Q1  
10 through 20 and some other things are transferred -- I am  
11 sorry -- yeah -- are transferred by the person who begins  
12 with J to a person whose name appears to be Jeff on November  
13 the 4th, 2011, correct?

14 A. Yes.

15 Q. This is slightly less than nine months after the person  
16 whose initials began with J took control of Q1, Q3, and  
17 other items, right?

18 A. Yes, that's correct.

19 Q. And so it doesn't say evidence storage. It says that  
20 apparently this guy has got this stuff.

21 A. According to this record, this person had  
22 responsibility for maintaining controlled custody of Q3 for  
23 all those months.

24 Q. But it doesn't say where?

25 A. Does not say where.



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1 Q. Doesn't appear to be in evidence locker, evidence  
2 storage, as near as we can tell?

3 A. It was not in storage. It was under this individual's  
4 control, custody, and responsibility.

5 Q. Now -- all right. Now, I want to look at Exhibit L,  
6 Page 3. This appears to be an examination of Q3. In fact,  
7 it appears as if it may be two examinations of Q3, one of  
8 them occurring on April the 4th, 2011; the other occurring  
9 on October the 17th, 2011.

10 See those?

11 A. Yeah. April 8th and October 17th.

12 Q. And I believe, if we look back at the affidavit of W.  
13 Mark Whitworth, that's Government's Exhibit 10, I can read  
14 it to you because it's not very long, and I am reading from  
15 Paragraph 3. I am not intending to read -- well, all right.  
16 I will read it.

17 "Specimen Q3 was initially received by the  
18 FBI Laboratory on November 30th, 2010. Q3 was  
19 assigned to the Explosives Unit, Chemistry  
20 Examination Group, on December the 7th, 2010."

21 That was the transfer we saw apparently, correct?

22 "Specimen Q3 was returned to the Explosives  
23 Unit, Device Examination Group, from the Chemistry  
24 Examination Group on February 23, 2011 and  
25 accepted by Explosives Unit Physical Scientist

1 James J. Evans."

2 Okay?

3 A. Okay.

4 Q. Now, so we have already reviewed the transfers from  
5 December 7th and February 23. And that was the one where it  
6 changed hands, apparently, within the Chemistry Examination  
7 Group?

8 A. Yes.

9 Q. Then it says, "Specimen Q3 remained in Mr. Evans'  
10 custody and control," and we saw that one too; is that  
11 right?

12 A. Yes.

13 Q. Okay. Now, I want to -- I have got Page 3 of Exhibit L  
14 on the screen because I want to move to the next paragraph.  
15 It says, "According to the laboratory notes, Mr. Evans  
16 completed the notes on Specimen Q3 on April 8th, 2011."

17 That appears to be documented here; is that  
18 correct?

19 A. That's correct. It was very short. It says, "See EUC  
20 report" and "Not device related."

21 Q. Okay. Then we see another handwritten entry under  
22 there. "Contains plastic melted pieces" -- may just say  
23 "piece." I am not sure. I think it says "pieces" -- "and a  
24 screw top plastic bottle top. Checked with nDNA Examiner  
25 Eberts and was advised that it would not be a good DNA

1 source," and with other initials, correct --

2 A. Correct.

3 Q. -- dated 10/17.

4 Now, there was no documentation of this item being  
5 given by Mr. Evans to anyone during this period of time, was  
6 there?

7 A. No, there was no custody transfer. It was in his  
8 custody.

9 Q. "SSA Whitworth began preparing to write the  
10 Explosives Unit report on October 17th, 2011, and  
11 requested that Mr. Evans place the evidence that  
12 was in his custody into an examination room for  
13 final review."

14 All right?

15 "It was discovered upon this review that Q3  
16 also contained a plastic screw cap. Explosives  
17 Unit policy is that the evidence may stay in the  
18 physical scientist's custody while the forensic  
19 examiner is reviewing the evidence and approving  
20 the final notes."

21 So apparently, even though Mr. Evans put the  
22 things in a room for Mr. Whitworth, they claim to have a  
23 policy in which that's not required to be documented. Is  
24 that the way you read or hear that?

25 A. That's the way I read that.

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1 Q. All right. And is that -- you have probably already  
2 given us that opinion, but is that an acceptable practice  
3 under the standards you have talked about?

4 A. No, because the difficulty is that it's safe to assume  
5 that that individual was responsible for more cases during  
6 those many months, and that then puts the burden of  
7 responsibility on that person to ensure that there's no  
8 commingling or contamination or mixups involving multiple  
9 cases.

10 Storage rooms are designed to accomplish that.  
11 Evidence storage rooms are designed to accomplish that.  
12 Leaving up to an individual to manage it in any way they see  
13 fit is a much less controlled situation.

14 Q. Let's go back to T-3. T-3 we looked at briefly a while  
15 ago. These are the Collection Notes and then further  
16 processing of Q3 within the Nuclear DNA Unit.

17 So what we see for these -- for Q3 is Collection  
18 Notes; that is, swabbing, on two different dates: February  
19 the 14th and March the 12th, 2012, correct?

20 A. Correct.

21 Q. And unlike T-1, the Maglite, it appears that the  
22 collection here refers to the actual swabbing as opposed to  
23 extraction, correct?

24 A. Yes. The system here, you will note, no longer says  
25 Describe By. So there has been a change in their LIMS

1 system between these two items of evidence or at least a  
2 change in this reporting.

3 So the only information we have is that one was  
4 collected on February 14th and one on March 12th.

5 Q. All right. And I want to stay on the first page of  
6 T-3.

7 We see that three reagent blanks are created; that  
8 is, collected on February the 15th of 2012, which is the day  
9 after the swabbing seems to have taken place.

10 A. Correct.

11 Q. And a while ago we talked about how it's all wet  
12 swabbing, right?

13 A. Yes.

14 Q. And what is the laboratory practice supposed to be with  
15 regard to preparing the reagent blanks.

16 A. In order to monitor the process, it's imperative, as  
17 I said, to have them done at the same time using the same  
18 reagents. Water is a reagent. That's why it's frequently  
19 referred to as reagent water.

20 So if you use water to wet the tip of your Q-tip  
21 that you then swab the evidence, that same bottle of water  
22 that you use to wet that Q-tip needs to be used for  
23 preparation of the reagent blank, same day, same time.

24 In this case, the laboratory did the swabbing on  
25 one day by one person, and then the next day that person

1 came in and prepared the blanks when they were doing the  
2 extraction. Extraction is simply the process of trying to  
3 remove the DNA from the swab.

4 Q. All right. And we see that process repeating itself  
5 with the second swabbing of the flashlight -- I am sorry --  
6 the screw cap. That is on March the 12, 2012, the swabbing  
7 occurs. The reagent blanks are prepared again the next day?

8 A. Correct.

9 Q. And I take it your opinion about that practice would be  
10 the same as what you just said?

11 A. It is. In order to have that blank be an effective  
12 monitor for contamination during the testing process, it  
13 must be contemporaneous with the testing process. And if  
14 the water is used to prepare the swabs, then that same water  
15 should be used for the blanks. We have no basis for knowing  
16 whether it was the same water or different.

17 Q. That not being documented anywhere?

18 A. Correct. You can note that on the Extraction Notes  
19 page, it gives you bar codes for each of these consumable  
20 items. That matters to show that they were all the same at  
21 the time it was prepared.

22 So there's a bar code for the tubes that were  
23 used, and there's a bar code for the Proteinase K. Each  
24 individual item has its own unique identity.

25 Q. So let's go back to Exhibit W.

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1 I am looking at Page 3. Now, you referred to this  
2 a while ago as your opinion based on the review of the  
3 discovery that I provided, correct?

4 A. Yes.

5 Q. And Q -- and then Page 3, spilling over to Page 4  
6 describes the various reasons why you believed at that time  
7 there was -- the Q3 sample was lacking in integrity,  
8 correct?

9 A. Yes.

10 Q. The conclusion you made at that time is that the  
11 conditions that you set out; that is, the five  
12 standards for what it takes to establish integrity  
13 of a sample, "These conditions were not met for  
14 the evidence leading to the DNA sample that was  
15 identified as Q3-1. The evidentiary sample lacked  
16 integrity, and as a result, the reported DNA  
17 results should not be assumed to represent a  
18 bottle cap that originated on the seized Fanta  
19 bottle."

20 That was your opinion at the time?

21 A. It was.

22 Q. Having continued to study the case, interact with us,  
23 review material, and hearing the testimony today, does it  
24 remain your opinion?

25 A. It does.

1 Q. Going further back to Q12, if we could look at  
2 Page 5 of 5, the last paragraph before the word  
3 "Conclusions," "Based on this internally  
4 inconsistent record, it isn't possible to  
5 conclusively demonstrate exactly who prepared  
6 Analytical Samples Q12-1a and Q12-1b, whether they  
7 were actually prepared from the Q12 flashlight,  
8 and when these key analytical samples were  
9 prepared. The integrity of the Q12 analytical  
10 sample was compromised, meaning that the DNA  
11 results from this sample should not be assumed to  
12 have originated from the Q12 flashlight."

13 That was your opinion when you wrote this letter?

14 A. It was.

15 Q. And is it your opinion today?

16 A. It is.

17 Q. Thank you.

18 MR. LESSLEY: Those are my questions.

19 THE COURT: Mr. Fitzgerald.

20 **CROSS-EXAMINATION**

21 BY MR. FITZGERALD:

22 Q. Ms. Arvizu, could you please tell us something about  
23 your background in forensic science?

24 A. I am not a forensic scientist. I am an analytical  
25 chemist who addresses data quality in the broad application.



1 Over the course of my career, I have audited labs  
2 that do environmental work, food, pharmaceutical testing,  
3 and forensic testing is just another application of  
4 analytical chemistry.

5 Q. You have never worked at a DNA lab, correct?

6 A. I have not. I have been -- under court order observed  
7 DNA testing in three cases, two involving state laboratories  
8 and one involving a commercial laboratory.

9 Q. The curriculum vitae I have before me, Defendant's  
10 Exhibit V, states that you have started but not finished a  
11 PhD; is that correct?

12 A. That's correct.

13 Q. So your academic credential is a bachelor of science?

14 A. That is correct.

15 Q. In your audit of the records pertaining to this case,  
16 did you strictly concern yourself with the papers or did you  
17 talk to people at the lab?

18 A. I strictly reviewed records. I did not speak with  
19 anybody at the laboratory.

20 Q. Did you focus on discrepancies or did you look for  
21 things that were done correctly?

22 A. I don't know how to answer that. The process of doing  
23 this kind of an audit, typically I start with the item of  
24 evidence at the point it's identified in the field and  
25 follow it sequentially by -- according to time to see

1 everything that happened to it.

2 And then I monitor each of those practices to see  
3 if it complied with the requirements.

4 In this case, for example, with Item -- the bottle  
5 cap, it was very difficult to do that way. It was  
6 essentially impossible because there was no documentation of  
7 the original identity and packaging and so forth of that  
8 item of evidence.

9 So I had to adopt a little bit different  
10 perspective. I started with the results and worked  
11 backwards instead of starting at the beginning and working  
12 to the end.

13 Q. But it's true that your audit contains mostly things  
14 that were done wrong. You didn't point out anything in your  
15 testimony about procedures that were followed?

16 A. Oh, that is correct. I typically only identify  
17 discrepancies. The role of an auditor is essentially not to  
18 identify the things that are right but to identify the gaps  
19 between accepted practice and what was done.

20 Q. So for example, if you find that item -- and we saw  
21 some papers that Mr. Lessley directed you to and essentially  
22 led you through. We saw that there were some line-outs and  
23 there were some initials. You weren't interested in hearing  
24 the explanations for those. You just looked at the  
25 line-outs and the corrections and drew conclusions about the

1 reliability of the records; isn't that true?

2 A. I think that's a little bit of a misrepresentation, if  
3 I could explain. When line-outs are made near the time that  
4 the original entry was made and it is apparent the nature of  
5 the discrepancy, like a transcription, that's pretty clear  
6 and it's not necessary to give an explanation.

7 When changes are made at a time much later than  
8 the original entry, generally that requires an explanation,  
9 and that doesn't mean asking somebody what they did. It  
10 means that the person who makes that change needs to  
11 document the reason for the change and the basis for the  
12 change on the record.

13 So there actually should be an explanation of  
14 exactly why they think that those were the actual samples  
15 that were transferred on that date or that it wasn't really  
16 the date I wrote down. It was a different date. And how  
17 they know that is was it a deduction that it was most likely  
18 that date because they recognized the discrepancy? What was  
19 the basis?

20 And the closer you get in time, the more  
21 contemporaneous the record change is, the more reliable it  
22 is. As the time gets longer, the reliability of that change  
23 essentially decreases.

24 Q. I am glad you brought that up because you make repeated  
25 mention of the lack of contemporaneous note-taking.

1 A. Yes.

2 Q. And after-the-fact reporting.

3 For a police officer who is collecting evidence in  
4 the field, you would grant that police officer some period  
5 of time, especially in the heat of battle, so to speak, in  
6 collecting evidence to gather thoughts and make records,  
7 would you not?

8 A. Oh, certainly.

9 Q. You are not saying, I am out there picking up evidence  
10 off the crime scene with one hand and note -- taking notes  
11 on my evidence ledger with the other?

12 A. No, certainly not.

13 Q. So there is a period of time after which officers  
14 should be given to make reports?

15 A. Absolutely. Completeness and clarity still matter, but  
16 I certainly wouldn't expect them to do a two-handed exercise  
17 out in the field.

18 Q. And you are familiar, in the case of Q12, you know that  
19 there is evidence that multiple swabs were taken on the same  
20 object?

21 A. Um, I don't remember how -- I only looked at the  
22 records for one, I think. Multiple swabs on Q12?

23 Q. Well, wasn't there a Q12-1a and a Q12-1b? Wasn't that  
24 the testimony?

25 A. Oh, I believe they generally do them in duplicate. I

1 thought you were referring to on multiple occasions.

2 Q. No. I think the multiple swabs on the same object.

3 A. Oh, just the duplicate swabbing at the time it was  
4 originally done. I apologize. I misunderstood you.

5 Q. So is it your testimony that both those swabs need to  
6 be tested at the same time?

7 A. No, that's not necessarily a requirement.

8 What is a requirement is that the batch of samples  
9 that includes both questioned and known samples must all be  
10 processed at the same time.

11 It's perfectly acceptable to go back at a later  
12 date and swab the same item of evidence again and generate  
13 another sample in another batch. But that batch must also  
14 have all of its samples processed at the same time.

15 Q. And so you sat here while Amber Carr testified, and you  
16 know that she had a great deal of confidence that that was  
17 the case.

18 You do not?

19 A. I do not. I -- and my confidence is not increased by  
20 listening to Ms. Carr's testimony because in my experience  
21 as an auditor, analysts and supervisors in laboratories tend  
22 to convey their explanation of the way they expect things to  
23 run and the way they expect things to be done properly.  
24 They don't necessarily know actual practices that were done  
25 in any given case.

1           So unless she was the analyst in this case and had  
2     some memory of her work in this particular case, although it  
3     was very helpful to me, frankly, to understand from her the  
4     problem of the data system overwriting records and that type  
5     of thing, that was very helpful to me, it does not -- she  
6     wasn't involved in this testing, so her testimony doesn't  
7     help me in that regard.

8     Q.    But her testimony did indicate that she was confident  
9     that procedures had been properly followed?

10    A.    That was her testimony, and I am sure that was her  
11    opinion.

12    Q.    And that not only was the methodology correct, but the  
13    laboratory's adherence to that methodology was correct as  
14    well?

15    A.    Well, I could point out to her where it wasn't.

16           For example, the laboratory's procedure for  
17           extraction of DNA that was in effect at the time  
18           that this work was done very specifically states  
19           that "Notes taken during the examination of an  
20           evidence item; parenthetically, that is,  
21           description, test results, et cetera, closed  
22           parenthesis, must be taken immediately after the  
23           procedure. Such notes must be recorded in their  
24           final form; that is, entered electronically into  
25           the casework worksheets prior to beginning the

1 examination of another evidence item of that case  
2 or batch."

3 What that says is essentially that when you are  
4 filling out your records, that Collect By and Entered By  
5 information that we had, it has to be done  
6 contemporaneously, immediately after the work is done, and  
7 it must be recorded in its final form.

8 Yet this person, JEE, signed off on a record that  
9 clearly did not because it represented a physical  
10 impossibility.

11 So they knew that their -- or at least now they  
12 know that their system was overwriting records, overwriting  
13 information on the forms; yet they still signed off on  
14 information that they knew to be incorrect. That's not  
15 compliant with their own procedure and certainly not  
16 compliant with good recordkeeping practices.

17 Q. Well, I understand that that's your opinion, but her  
18 opinion is different, and so there's a difference of opinion  
19 here.

20 A. Differences of opinion happen every day.

21 Q. And so that has to be resolved. That's an issue that  
22 has to be resolved?

23 A. I certainly hope it is. I hope they have a corrective  
24 action record that will demonstrate that.

25 Q. You are familiar with Government Exhibit 5 in this

1 case, the evidence chronology? You have seen it?

2 A. Just today, yes.

3 Q. So you listened to Special Agent Soule testify and saw  
4 where the exhibit shows that at 6:30, certain items were  
5 placed into a bag and assigned Evidence Item No. JTP2.

6 You are aware of that?

7 A. I am aware that this was created after the fact as an  
8 explanation for the sort of original packaging of the item.

9 Q. Correct. It's an after-the-fact explanation of what  
10 happened. So these evidence items were sealed according  
11 to -- again, according to Government Exhibit 5, these  
12 evidence items were sealed and that container was labeled  
13 JTP2, and that seal was not opened until examined by the FBI  
14 Lab, correct?

15 A. It's certainly true that that seal was not opened until  
16 it was analyzed by the FBI Lab. But again, we still don't  
17 have a record of exactly when and how that item was  
18 identified, a contemporaneous record of when that item was  
19 identified where.

20 Q. If that seal wasn't broken, though -- again, with  
21 respect, if that seal was never broken from the time the  
22 evidence was sealed up at 6:30 on November 28th until its  
23 arrival at the FBI Lab, where was the opportunity for  
24 introduction of a different bottle cap?

25 A. Well, the problem is a little broader than that because



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1 there's other parts in the chain. There's the assumption  
2 that this bottle cap belonged to that bottle of soda. I  
3 don't remember what kind it was. Fanta or something.  
4 Whether those were associated. They were not associated in  
5 the field. They were assumed to be associated. And once  
6 it's in the laboratory, at various and sundry times,  
7 different items of evidence were assigned the same number,  
8 Q3, Q3.1, Q3-1 was described differently at different points  
9 in the process, which, taken as a whole, makes it  
10 extraordinarily difficult to understand with confidence  
11 exactly what happened to which item and when it happened.  
12 That's the difficulty.

13 And I can absolutely appreciate the fact that this  
14 sequential chronology was prepared because it helps a lot to  
15 try to understand these records because there are so many  
16 internal inconsistencies.

17 But I have to rely on the original records. This  
18 is not a primary record. This is a secondary source, which  
19 has its value but not as much as the primary record.

20 Q. But if you keep going with that, I mean, you look at  
21 the -- you know when the search warrants were executed at  
22 the home and the garage by referring to Exhibit 5. At least  
23 you know what the Exhibit 5 tells you and what Special Agent  
24 Soule had to say about that under oath.

25 A. Yes.

1 Q. And you understand that the timing is such that there  
2 was no opportunity for that bottle cap to be introduced into  
3 JTP2 by some extraneous method other than the officer who  
4 put it in there and sealed it?

5 A. That's -- that's not my job. That's really -- that's  
6 somebody else's responsibility. I am just evaluating  
7 whether or not these results stand on the basis of the  
8 supporting record.

9 Q. So even more narrowly than that, your job is to find  
10 problems with paperwork.

11 A. It is the nature of the scientific process that we do  
12 not rely on memory; that we rely on records and results that  
13 can be reproduced by other scientists after the fact.

14 Paperwork and being picky about paperwork is not  
15 an undesirable quality in a scientist. It is in fact a very  
16 desirable quality.

17 Q. But you would admit that even if the paperwork was  
18 imperfect, that doesn't necessarily mean that the bottle cap  
19 that was tested at the lab was not taken from the crime  
20 scene.

21 A. It does not. It simply means that we can't demonstrate  
22 that it was. That's a very important point.

23 Q. With the paperwork?

24 A. The fact that any paperwork is problematic doesn't mean  
25 that the result means or doesn't mean something.

1           The problem is that we can't demonstrate how  
2     reliable that result is unless we have a complete and  
3     cohesive paper trail to prove it.

4     Q.   Which is not standing by itself but which is supported  
5     by witness testimony and determinations of credibility,  
6     correct?

7     A.   Certainly those are issues, but the paper trail for the  
8     scientific process should stand on its own. It should  
9     absolutely not depend on anybody's memory. It should stand  
10    on its own --

11    Q.   But you understand --

12    A.   Under the standard for testing laboratories, that's the  
13    expectation.

14    Q.   That's the standard for testing laboratories, but in  
15    criminal cases, courts have a duty to hear witnesses -- hear  
16    testimony from relevant witnesses.

17    A.   You are outside my area of expertise. I defer to you  
18    for that.

19           MR. FITZGERALD: I think that's all the questions  
20    I have. Thank you.

21           THE COURT: Anything further?

22           MR. LESSLEY: Just one, Your Honor.

23                   **REDIRECT EXAMINATION**

24    BY MR. LESSLEY:

25    Q.   Ms. Arvizu, during your cross-examination, you referred

1 to a document that you read from, a document that talked  
2 about notes being recorded in their final form immediately  
3 after the conclusion of the work?

4 A. Yes.

5 Q. Can you tell us what that document was that you were  
6 reading from?

7 A. This is from the DNA procedures manual. It's  
8 documented DNA 202-4.DOC that was issued February 26th,  
9 2010, and it is Revision 4.

10 Q. All right. But it is an FBI Laboratory policy and  
11 procedure?

12 A. Yes. This was provided in the discoverable materials  
13 as the -- and it is a copy of the one that was signed and  
14 put into place in the laboratory.

15 MR. LESSLEY: Thank you. Those are my questions.

16 THE COURT: May this witness be excused?

17 MR. LESSLEY: Yes.

18 MR. FITZGERALD: Yes.

19 THE COURT: Thank you. You may stand down.

20 So Mr. Lessley, is that the conclusion of your --

21 MR. LESSLEY: That's the conclusion of mine, Your  
22 Honor. Mr. Fitzgerald and Mr. Soule and I had a discussion  
23 at the beginning of the lunch hour about whether Mr. Mueller  
24 is or isn't necessary.

25 I suppose Mr. Fitzgerald can advise the court

1 about whether he intends to call another witness or whether  
2 we are finished with the evidence.

3 MR. FITZGERALD: Judge, the purpose of calling  
4 Special Agent Mueller would be to eliminate the appearance  
5 because there were questions about one particular item of  
6 evidence, which actually wasn't even an item of evidence in  
7 this case, but it was -- or in this particular -- that's the  
8 subject of this motion, but there was a question about  
9 whether there were two separate chains of custody for the  
10 same piece of evidence. And I want to eliminate any concern  
11 that the court might have that the FBI is in the business of  
12 creating fictitious documents.

13 So that's my concern.

14 MR. LESSLEY: Your Honor, I understood that point.  
15 That wasn't the point I was making. And if Your Honor -- I  
16 think I can probably satisfy the government if Your Honor  
17 would refer to some exhibits, and I will walk through what  
18 the actual point I was trying to make. And I understand why  
19 they think that.

20 THE COURT: So your exhibits or --

21 MR. LESSLEY: Mine.

22 THE COURT: Okay.

23 MR. LESSLEY: What I was looking at was the last  
24 several pages -- I better refresh myself about which one it  
25 was -- of Exhibit H. Okay? H- -- excuse me -- H-1. H-1 is

1 the FBI; that is, the Oregon FBI chain-of-custody logs for  
2 various items of evidence.

3 THE COURT: Um-hmm.

4 MR. LESSLEY: The last two pages of H-1 I pointed  
5 out as both relating to 1B4. And I pointed out that even  
6 though they contained the same information, the two  
7 documents are not identical. They are actually -- one is  
8 not a copy of the other. They are separate documents that  
9 appear to relate to the same item of evidence.

10 And the explanation that didn't come out, and I  
11 stopped asking Mr. Soule questions because he said he didn't  
12 know the answer to some of my earlier ones, and so I didn't  
13 want to put him on the spot, but the answer -- further  
14 explanation was actually given by H-2 and by Mr. Mueller's  
15 report. The second page of H-2 describes 1B4 as a two-liter  
16 plastic Fanta bottle. Okay?

17 The third page of H-2 identifies 1B4 as the liquid  
18 removed from the Fanta bottle. And the court will note that  
19 they have different bar code numbers for the two 1B4s.

20 Agent Mueller's report says that Agent Mueller  
21 removed the liquid from the bottle. And so I believe the  
22 explanation for why there are two chain of custody reports  
23 is one of them related to --

24 THE COURT: Had a full bottle and one had an empty  
25 one.

1 MR. LESSLEY: Well, one was the full bottle and  
2 the other was the container containing the liquid into which  
3 he placed the liquid.

4 My point wasn't to say that they manufactured a  
5 chain-of-custody form. My point was to show that, as is  
6 often true in the case, they didn't adequately document the  
7 chain of custody of either piece of evidence because they  
8 didn't separately identify the two pieces of evidence. They  
9 had now two pieces of evidence with the same number on them.

10 And so the point I was making was a documentary  
11 one rather than a pernicious one. And it was a failure to  
12 change the number or create a new number for one of the  
13 items of evidence that had been -- that had been -- after  
14 the two were separated. And so I hope that's a satisfactory  
15 explanation for Mr. Fitzgerald, but that was my intention in  
16 raising that point.

17 MR. FITZGERALD: And based on that explanation,  
18 Your Honor, there's no need to call Special Agent Mueller.

19 THE COURT: All right. Do you want to argue now?

20 MR. FITZGERALD: Your Honor, my argument is very  
21 short, and it's essentially the same argument the government  
22 made in its response, and that is that all of the matters  
23 that we are talking about here today are really matters that  
24 are for the jury and not Your Honor.

25 As Ms. Arvizu just admitted on the stand, there's

1 a difference of opinion in this case among the experts. And  
2 clearly she made a case for there being some discrepancies  
3 in paperwork. Those are excellent points to make in front  
4 of a jury, and you can always cross-examine witnesses and  
5 present contrary evidence and argue reasonable doubt, and  
6 that's why we have jury trials.

7 But to say that the evidence should be suppressed  
8 is contrary to the *City of Pomona*. And so that's where the  
9 government is with this motion.

10 MR. LESSLEY: Well, Your Honor, this is, in some  
11 sense, a repetition of oral argument we did back in December  
12 in another motion, and that is where the balance lies  
13 between the court's gatekeeper function and the jury's  
14 fact-finding function.

15 We maintain that the government bears the burden  
16 of demonstrating to the court that the evidence has got at  
17 least enough reliability that the jury ought to be able to  
18 consider it.

19 And when there are major gaps in the chain of  
20 custody, when there are major issues about where an item was  
21 or whether it's the same item or whether it's in the same  
22 condition or how it got to where it is, then those are  
23 things that the court needs to look at and shouldn't just  
24 say, oh, well, we'll leave all that up to the jury. There  
25 are actually -- the rules of evidence don't contemplate that



1 the jury gets to consider everything. They do contemplate  
2 that the court has a function in determining what the jury  
3 does and doesn't get to hear.

4 Now, there are two -- I think there are two issues  
5 here. One is simply a chain-of-custody issue in the normal  
6 way that the court looks at chain-of-custody issues under  
7 the rules of evidence. And that has to do with the police's  
8 handling of the item and how the item got to the FBI Lab.

9 There's a second issue, which is the *Daubert*  
10 issue, which is whether, under scientific standards, this  
11 handling of the evidence is sufficiently reliable to meet  
12 the standards set out under *Daubert*. Okay? And I think  
13 those are somewhat different standards.

14 The chain-of-custody issue I have only raised with  
15 regard to the bottle cap, not with regard to the flashlight.  
16 But it's important.

17 I mean, the truth of the matter is this item  
18 disappeared for a long, long, long period of time. It  
19 then -- then a bottle cap reemerges. But there is no  
20 demonstration as to whether it's in the same condition that  
21 the bottle cap was when taken in the photograph. There's  
22 not really even much of a photograph of the item.

23 There is a lot of after-the-fact speculation about  
24 despite the fact that a certain officer said I separately  
25 packaged each item of evidence; now he says, oh, I didn't.

1 It would have been natural for me to put it there. We don't  
2 get to do that. You are supposed to make a record of the  
3 collection of the evidence, and you are supposed to maintain  
4 where the evidence was at any particular point in time.

5 Now, I need to beg a little bit of indulgence  
6 while I find one thing. Okay? I am not the only one who  
7 thinks that.

8 Okay. I am looking at my Exhibit E, which is a  
9 portion of the Corvallis Police Department case report in  
10 which an officer named Bretton Roach wrote:

11 "Based on the fact that the bottle cap is not  
12 in the Corvallis PD evidence storage and it is not  
13 stored by the FBI, it appears that the bottle cap  
14 was initially seized but never entered into  
15 evidence. I am unable to account for the location  
16 of the bottle cap at this time. If the cap is  
17 located in the future, it would be unusable as an  
18 evidence item due to the lack of chain of  
19 custody."

20 And so I am not the only one who thinks that the  
21 chain-of-custody demonstration made here by the government  
22 is inadequate. The Corvallis Police Department thinks so  
23 too, and they wrote it in a report.

24 And so we can say, or the government can say, as  
25 it has, that the jury ought to be able to look at all this

1 stuff. But the jury doesn't get to look at stuff that  
2 doesn't meet minimal standards of reliability, and this  
3 doesn't. This bottle cap was gone for a long time. Another  
4 bottle cap springs up out of nowhere. We don't know whether  
5 it's the same bottle cap. We don't know why it's in a  
6 different condition or a different coloration.

7 I also -- and this is the point, I just -- I want  
8 to go back and look at the initial claim by Detective Poole  
9 that he must have put the bottle cap inadvertently into the  
10 bag with the -- I don't know if it was him. I forget  
11 whether it was him. But I am looking at Exhibit B. Sorry.  
12 JTP2, "Bag with burned residue originally holding JTP3,"  
13 JTP3 being the bottle.

14 And I just don't understand -- and we have seen  
15 this description repeat itself. It was written on the  
16 outside of the bag. It shows up in the FBI documentation,  
17 it shows up in the FBI Laboratory documentation. This is  
18 the description of what became 1B3, what became Q3, "Bag  
19 with burned residue originally holding JTP3." And I just  
20 don't understand how you know there's burned residue in the  
21 bag without looking in the bag.

22 And if you look in the bag, you see that the  
23 little bits of burned residue that we saw in the picture are  
24 actually quite a bit smaller than the bottle cap.

25 So how do you know that there's burned residue in

1 that bag without also knowing that there's a bottle cap in  
2 the bag.

3 And so the government can say all it wants, Well,  
4 it was sealed up and all that, but how is it possible that  
5 someone looking in that bag would write what they wrote and  
6 not make a note of the bottle cap, especially since the  
7 bottle cap had been discussed among the police officers and  
8 everybody knew that a bottle cap had supposedly been seen  
9 and picked up.

10 And so my point before we ever get to *Daubert* is  
11 this doesn't pass muster even under rules of evidence  
12 standards, even under chain-of-custody standards, and the  
13 Corvallis Police Department agreed with me.

14 Now, the second issue, which is the *Daubert* issue,  
15 which is a scientific issue, and that is, you know, we have  
16 a thing known as the scientific method. It says that things  
17 are supposed -- under science, things are supposed to be  
18 testable and are supposed to be repeatable.

19 And the only way scientific method works is if you  
20 don't make assumptions about what must have happened and you  
21 don't -- you don't jump to conclusions based on somebody's  
22 reconstructed memory after the fact. What you do is you  
23 create a record, a regular record, a regular process.

24 And so that didn't happen here. It unarguably  
25 didn't happen here. There's not even a close question that

1 it didn't happen here. And so that's the reason why we call  
2 the laboratory auditor to say this doesn't pass muster by  
3 the standards of quality assurances that are expected by  
4 laboratories.

5 And so, you know, Mr. Fitzgerald cites the *Pomona*  
6 case. I read the *Pomona* case. I appreciate his bringing it  
7 to my attention before court so that I could have a chance  
8 to study it. It talks about how minor issues having to do  
9 with the application of method don't rise to the level of  
10 *Daubert*.

11 But this isn't a minor issue. This is the  
12 disappearance of an item for a long, long, long, long period  
13 of time and no particular explanation being made to show  
14 that it was ever in the bag in the first place or whatever  
15 happened to things that were handled both by the Corvallis  
16 Police Department and, frankly, also by the FBI Laboratory,  
17 which didn't document the movement of that item very well  
18 either or the contents of that item very well either.

19 So we are back to where we started, which is at  
20 what point does the court have the gatekeeper function. And  
21 I think the gatekeeper function that the court has is a  
22 higher standard than the government does, and I think that's  
23 really the crux of the issue that we have, and I don't know  
24 that I need to belabor that point any longer.

25 MR. FITZGERALD: Your Honor, I would just ask that

1 you not rely on the officer's legal opinion in this case  
2 because, number one, he was working off of a lack of facts  
3 at the time he made that statement; number two, he didn't go  
4 to law school.

5 THE COURT: Well, I am going to tell you some gaps  
6 that I see in this record right now that have some problems,  
7 and I am going to ask for supplemental briefing because this  
8 isn't just a perfunctory issue.

9 So we are trying -- I have been trying to follow  
10 just the details of just some basics.

11 So where in the record does it say when and --  
12 when and where was JTP2-1B3-Q3 bag unsealed by the FBI? Is  
13 that answered in this record? Has that been made clear? If  
14 I have missed it, please tell me.

15 Which officer actually placed the bottle cap in  
16 the bag in the first place? Do we have -- is that noted in  
17 the record?

18 There's some reference to Poole. Was it Poole?  
19 But do we have anything documenting that? His report  
20 indicates that he left it in the bag but not that he placed  
21 it there.

22 So there are some gaps here. And, you know,  
23 there's a difference between *Daubert*, and there's a  
24 difference between *Daubert* and a chain of custody in terms  
25 of what's reliable. These are not perfunctory matters.

1 These matters are threshold issues.

2 The *Daubert* standard is low. And I have had many  
3 *Daubert* hearings, and if the scientific basis for which an  
4 opinion is being offered is documented and conclusive that  
5 everything was followed, it's just that simple, it's  
6 followed.

7 But there's a real difference in terms of how you  
8 handle the evidence, and there are concerns in this record.  
9 And so I am going to -- it's different than the *Pomona* case.  
10 The *Pomona* case talks about some matters which related to  
11 *Daubert*. It doesn't touch on these other issues.

12 So I am tipping my hand, and I am going to ask for  
13 supplemental briefing because I don't think, now that I have  
14 whatever testimony was offered today, what I have on the  
15 record, that it's adequately answered by your briefing.

16 So that's where we stand.

17 So how long do you need to respond?

18 MR. LESSLEY: Your Honor, I'd ask if we could have  
19 a transcript prepared before the briefs are due.

20 MR. FITZGERALD: I am asking for the same thing,  
21 Your Honor.

22 THE COURT: I suspected as much.

23 So we'll -- that will take about?

24 THE COURT REPORTER: 30 days.

25 THE COURT: 30 days. Is that reasonable?

1 THE COURT REPORTER: Yeah.

2 THE COURT: 30 days and then two weeks after that  
3 to respond?

4 MR. LESSLEY: Is the court anticipating  
5 simultaneous briefing?

6 THE COURT: You know, I have told you kind of the  
7 issues. So I would hope we would be able to do it and get  
8 moved on in this case.

9 MR. LESSLEY: All right.

10 THE COURT: Well, yeah. And there's a lot of -- I  
11 have another note we made earlier on the flashlight.  
12 There's -- I think you need to rehash -- I have kept these  
13 issues separate. There's the bottle cap issue and then  
14 there's the flashlight issue. So I think you need to both  
15 reiterate your positions on the flashlight given what we  
16 heard today. All right?

17 And just as a heads-up, you know, a lot of time  
18 was spent on the role of this last witness. I'd have to  
19 say, having been through, now, in this job, any number of  
20 audits, I respect anybody who is willing to take on those  
21 obligations because they are difficult.

22 But in a case like this, to have somebody who is  
23 auditing and to have that kind of work done to verify the  
24 kinds of documentation and discovery and/or evidence we are  
25 going to bring into the courtroom, it's good to know people



1 are going to that extent to make sure what we have is the  
2 right evidence.

3 So I want to take my care with this one, so do  
4 your best job in the briefing.

5 But I would tell you, Mr. Fitzgerald, there's a  
6 separate issue between the *Pomona* case and what the  
7 chain-of-custody issue is. Okay?

8 That's all. Thanks.

9 THE CLERK: Court is in recess.

10 *(The proceedings were concluded this*  
11 *6th day of January, 2015.)*

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1 I hereby certify that the foregoing is a true and  
2 correct transcript of the oral proceedings had in the  
3 above-entitled matter, to the best of my skill and ability,  
4 dated this 15th day of January, 2015.

5  
6 /s/Kristi L. Anderson

7 Kristi L. Anderson, Certified Realtime Reporter  
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